## CHAPTER 1

#### **EXECUTIVE SUMMARY**

Warwick has thirty-nine miles of coastline on Narragansett Bay, of which over eleven miles are publicly owned. Despite the extent of development in this mature city, Warwick still possesses significant environmental resources. As land continues to be consumed by development, the opportunities to preserve these resources will decline even though the demand for open space and recreation will rise.

Warwick's most important wildlife habitats are located in its wetlands; salt and freshwater marshes, streams, ponds, and the Bay. Upland woodlands, particularly in the southwestern sections of Warwick which remain undeveloped provide valuable wildlife habitat for fox, deer and a wide variety of more commonly observed mammals and birds. Buckeye Brook provides a means for herring to "run" upstream, each spring, to spawn in Warwick Pond. The marshlands along Mill Cove support a large amount of aquatic life and are one of the City's best shelters for ducks. Mary's Creek is one of the premier shellfish habitat areas in the State. Brushneck Cove and Baker's Creek Marsh provide significant areas for waterfowl feeding, resting, and cover. The Potowomut River and environs also provide a large estuarine habitat for a wide variety of marine and upland wildlife.

Inadequate stormwater controls have adversely impacted water quality in some areas of Warwick, such as Gorton's Pond and Pawtuxet River. These impacts result from oil, gasoline, lead and other petroleum products being flushed from roads, driveways and parking lots into the water bodies.

Rapid development of Warwick's remaining open space is causing a loss of significant wildlife habitat, especially in the southwestern section of the City. There are no significant commercially valuable mineral deposits within the City other than sand and gravel. In addition to stormwater runoff, Warwick's water quality is impacted by leachates from specific disposal systems, and discharges from recreational boater's toilets.

While the rapid growth rate of Warwick in the post-war years has gradually slowed through the 1970's and 80's, the cumulative effect of such growth has turned the City from a semi-rural sub-urban

community to a mature and in some areas, a densely settled urban community. While there is still room for additional growth, the City needs to look at its remaining farmlands, open spaces, and natural resources and conserve these for the future.

Despite the extensive development, Warwick's environmental assets include about 39 miles of coastal shoreline with beach, bluff, and marshland conditions. It has eight (8) navigable coves, extensive marina, and recreational facilities as well as areas of undisturbed natural beauty. The City has many inland ponds, rivers and streams that provide shelter for many wildlife species and vegetation. Wetland areas also remain somewhat undisturbed in the various coastal and inland bogs and marshes.

Among the City's environmental liabilities are noise related to T.F. Green State Airport, air pollution resulting from heavily congested highways, roadways and the airport, and water pollution particularly along the Pawtuxet River as well as other streams and ponds. A wastewater facilities program designed to significantly reduce pollution of the Pawtuxet, is now underway within the communities of Warwick, West Warwick, and Cranston. However, the non-point pollution will remain a significant problem. Noise pollution abatement is an ongoing program that needs to be strengthened by the State and Federal Government for the relief of people who live in the vicinity of the airport. Air pollution, which primarily comes from automobiles, has improved somewhat with the enforcement of emission standards on the automobile industry by the federal government. Among other activities that the City can undertake to further reduce air pollution is better transportation management and traffic control systems to reduce congestion and idling time. Street trees also have a positive effect in reducing ambient air pollution.

The City's recreation planning and programming activities has been a high priority spanning several administrations. The Planning Department has responsibility for planning and designing facilities while the Parks and Recreation Department has responsibility for the operation and maintenance of all City facilities.

The high level of commitment to recreation programs has ensured a superior recreation program for Warwick although growing needs have outpaced the City's ability to supply fields, as well as the

manpower and equipment to adequately maintain all of them.

The City's recreation program is conducted on a city-wide basis with emphasis on organized sporting activities and events. Other than tot lots and school yard playgrounds, most of the playfields are utilized on a city-wide basis as opposed to meeting strictly neighborhood needs. As a result, the neighborhood analysis of recreation needs shows great discrepancy in the number of facilities serving each neighborhood. This has the effect of making recreational facilities automobile dependent, or a best requiring young people to ride their bicycles to the facility. Some may have a facility within walking distance. In the future, the City will need to examine options to increase pedestrian accessibility and reduce automobile dependency for the playfields.

For planning purposes, Warwick is divided into eight districts wherein individual facilities were evaluated in terms of nationally accepted standards for recreation facilities. Not surprisingly, the City was most lacking in the availability of tot lots. However, the apparent shortage of tot lots may partially be fulfilled with the availability of private backyards in this suburban community. More significantly, the rising popularity of so-called "Magic Kingdom" playlots indicate a need for such facilities. In particular, as the growth of condominium and apartment units increase, the need for tot lots and neighborhood play areas will become more significant in the future.

In most neighborhoods, Warwick tends to have ample facilities for playgrounds, playfields, and recreation areas. Some neighborhoods such as Buttonwoods, Apponaug, Wildes Corner and vicinity appear to be more than adequately supplied, while others such as Hillsgrove and Norwood appear to be underserved. Part of the reason is that the Buttonwoods and Sandy Lane areas contain the two largest citywide facilities, City Park, and the Mickey Stevens Sports Complex.

While the City has ample supply of fields, there are shortages in facilities for certain activities.

Soccer is the fastest growing sport in Warwick and still is not fully served with full-time soccer fields.

Fields that are used for both soccer and baseball on a seasonal basis are not able to adequately fulfill the need because of severe maintenance problems that sometimes render the fields unfit for use. As new

fields are added to the City's system, many will have to be devoted entirely to soccer use.

The City's acquisition program for open space and recreation has tended to be based upon the availability of sites rather than on selecting areas where they are needed the most. At the present time, the two major opportunity areas have been in the vicinity of the airport where removal of homes for clear zones have provided acreage for recreation use. An example of this is the Winslow Playfield, which has expanded into what had once been house lots within the airport clear zone south of Main Avenue. Another is the clearance of land in the flood plain in Belmont Park. The result of severe flooding in that neighborhood required the removal of many homes, leaving a large parcel that is now being developed for park and recreation purposes.

Lack of signs to identify shore access rights of way has led to encroachments by adjacent property owners. This is a major problem since the majority of the City's shoreline is in private ownership, limiting public accessibility to the shore.

## **CHAPTER 2**

#### THE NATURAL ENVIRONMENT

The preservation of the City's natural resources is a primary goal in a city like Warwick that has experienced rapid growth over the past twenty years. The justification for preserving natural resources is to protect the environment for future generations so that the type of community that made Warwick desirable to live in will always be available for the future. These resources can be enjoyed by the City's residents as open space and for the recreational opportunities inherent in them.

Outdoor recreation is one of the ways to experience the natural environment. So considered, it becomes quite important to examine the condition of the natural environment in Warwick, particularly those areas where significant natural elements remain, as well as those facilities which have more conventionally been associated with formal or organized recreation. Despite the extensive development of the city, there are many areas, particularly along the shores and inland water bodies, where significant natural resources can be found. In a developed city, the importance of minor green spaces and well maintained playing fields is heightened, as is the significance of remaining waterways, wetlands, forests, open fields and farmland; each is important as a source of the outdoor recreation experience. Continuing the framework and policies of the 1973 Environmental Master Plan, this plan considers within its purview the outdoor recreation, open space and conservation areas of the City. Areas of ecological and recreational importance, scenic resources, and the coastal resources of the City are also included. Both public and private facilities have been considered here where they serve a significant number of people or represent an important potential resource. The objectives of this plan are five fold:

- a. To provide a comprehensive framework for the acquisition, development, and maintenance of the City's recreational and open space resources for the use
- b. To update Warwick's 1982 Recreation Recovery Action Program in light of

and enjoyment of Warwick's residents.

- Warwick's 1987 Recreation and Open Space Bond issues, and for the purpose of future planning, financing and management.
- c. To provide a detailed inventory of all outdoor recreation/open space/conservation facilities in the City,

as a basis for continuous recreation planning.

- d. To identify opportunities for expansion of the City's recreational and open space program through acquisition, development of facilities, programming, and maintenance of existing facilities.
- e. To integrate the Natural Resources, Open Space and Recreation Master Plan within the context of the overall comprehensive plan.

This plan generally follows the guidelines set forth by the State for open space and recreation components of the comprehensive plan and the standards for local recreation, conservation and open space plans. To meet these guidelines and standards, the following planning elements are addressed as part of the scope:

Community Context - This includes historical overviews, socio-economic factors, climate, topography, wildlife habitats, soils, freshwater and salt water resources, population, and growth and development patterns.

Role of outdoor recreation in the community's social and economic life.

Significance of open space to the welfare and character of the community.

Designation of planning districts (see Figure 1 on following page) and the basis for designation.

Inventory and assessment of facilities and resources.

Assessment of public and private land and water resources representing potential for providing significant outdoor recreation or open space opportunities.

Analysis of the community's need for new or expanded recreation facilities, maintenance of existing facilities and equipment, improved access, new or expanded open space and needs associated with different age groups in the community.

Goals, objectives and strategies for addressing the needs of the community.

Program of specific actions to be undertaken by the community to attain fulfillment of needs through capital and non-capital means.

## **CHAPTER 3**

#### MUNICIPAL CHARACTERISTICS

## Introduction

The need and demand for outdoor recreation is influenced by regional and local socio-economic conditions and local environmental factors. Warwick has the second largest population in Rhode Island, estimated by the State Division of Planning to be approximately 87,700 persons in 1990 and exceeded only by the City of Providence.<sup>1</sup> It is also the second largest employment area in the State with total employment in 1989 estimated at 41,125. Again, only Providence exceeds Warwick in this regard.

The City of Warwick experienced very rapid population growth from 1950 to 1960. From 1960 to 1970, increasing 59 percent to 68,504 persons in 1960. Population increased by 22 percent to 83,694 persons in 1970. Population growth has slowed in the last two decades. From 1970 to 1980 the U.S. Census recorded an increase to 87,123 for a 4 percent growth.

The decade of the 1980's may have witnessed a slowed growth of population for Warwick, but the City experienced an explosion of growth along the Route 2 corridor and continued growth in the Jefferson Boulevard area. From 1980 through 1985 alone nearly 2 million square feet of new commercial space and more than 400,000 square feet of industrial space was constructed in Warwick. In spite of this new trend, the City remains predominantly a residential community with 47.4 percent of its developed land in residential use (1985 data) and more than 80 percent of its undeveloped land, much of it in the Cowesett area, zoned residential. This area of the community has continued to experience residential growth during the period from 1985 - 1990.

From 1981 to 1988, the City experienced a growth of almost 3,000 new housing units. Table 1 indicates the breakdown among single family, multi-family and condominium units.

One result of the growth period during the last decade was the loss of open space and an increasing need for recreational opportunities, especially since most of the new development was in multi-family and

condominium development.

Table 1 City of Warwick New Housing Unit Development, 1981 - 1988

Year	Single-Family	Multi-Family	Condominium	Total
1981	98	23	190	311
1982	50	6	50	106
1983	64	42	350	456
1984	38	18	147	203
1985	140	16	162	318
1986	140	26	186	352
1987	2	7	291	300
1988	233	12	447	692
Total	765	150	1,823	2,738

Source: Building Inspector, City of Warwick

## **Location and Climate**

Warwick is located on the western side of Narragansett Bay approximately 10 miles south of the City of Providence. The City is in the central part of the State of Rhode Island, 55 miles south of Boston, MA and 175 miles northeast of New York City.

The City is completely bounded on the east by Narragansett Bay, on the north by the City of Cranston, on the west by the Town of West Warwick, and on the south by the Towns of East Greenwich and North Kingstown and by Greenwich Bay, a large subembayment in the

Narragansett Bay estuary.

The Pawtuxet River forms a significant segment of the City's western and northern boundary with West Warwick and Cranston. The Potowomut section is separated from the balance of the City to the north by the Town of East Greenwich and Greenwich Bay. Fronting as it does on Narragansett Bay and Greenwich Bay, Warwick has 39 miles of coastline and nine sheltered coves.

In Warwick, the distinction between the four seasons and the extremes of temperature are

modified significantly by the proximity to Narragansett Bay and the Atlantic Ocean.

The winters are milder than areas further inland and many summer days, which would otherwise be uncomfortably hot, are cooled by refreshing sea breezes.

January and February are the coldest months, and July and August are the hottest. Freezing temperatures are common occurrences between the latter part of November and the end of March, and average about 117 days per year. Maximum daily temperatures below freezing occur about 15 days out of the year. However, sub-zero weather is rare, averaging only one day during the month of February. Daily temperatures over seventy degrees become common occurrences near the end of May and cease toward the latter part of September. Particularly hot temperatures are unusual, with ten days out of the year experiencing temperatures over 90 degrees on the average. Occurrence of these hottest days is scattered over a relatively short period, ranging from late May to late August. The annual average temperature is approximately 50 degrees (F). The coldest month is January with a mean temperature of 28.7 degrees (F), and the warmest month is July with a mean temperature

of 71.0 degrees (F).

Measurable precipitation occurs about one day out of every three and is fairly evenly distributed throughout the year. Much of the rainfall between May and August is of short duration, often associated with thunderstorms. Due to the moderating influence of the coastal location, much of the winter precipitation occurs as rain rather than snow, and it is unusual for the snow to remain on the ground for extended periods of time even when it occurs. Snowfalls are generally confined to the period from the end of November to the beginning of April. Annual precipitation is approximately 44 inches, and annual snowfall is approximately 36 inches.

Prevailing winds are from the south-southwest for most of the year, shifting to the north-northwest during the winter months. Mean wind speed is 10.8 miles per hour. Wind speeds of near gale force or higher (over 31 miles per hour) have been observed only 0.3 percent of the year. Most common winds are in the 8-12 miles per hour range.

## Topography

Warwick is essentially divided into two topographically distinct areas (see Figure 2 on

following page):

 A seaboard lowland area comprising all of the north and central areas and Potowomut;

 An upland area which covers the western and southwestern areas, principally Cowesett. (A rather pronounced escarpment separates the lowland from the upland).

The lowland is a rather flat area ranging in altitude from sea level to 100 feet, with isolated hills such as Warwick Neck, and scattered depressions and ponds of varying size dotting the plain. The upland area consists of several hilly areas separated by stream valleys. The hilly areas are characterized by smooth, wooded slopes, areas of excessive slope, and generally rough topography and high elevation. Spencer Hill at 350 feet is the highest point in the City.

Slope conditions in Warwick are for the most part gentle and moderate. Areas, which may be considered in excessive slope, that is, a deterrent to normal building procedures and generally above 15 percent, are found in various areas of the City. The western portion of the City contains most of the areas of excessive slope, particularly the Cowesett area.

Significant areas of steep slopes can also be found along the Pawtuxet River and on Warwick

Neck.

## **Soil and Groundwater Conditions**

This section provides a generalized view of the soil and geologic conditions in the City. The information herein is based upon non-specialized soil and geologic surveys and has been interpreted for use for community planning purposes. Hence, it should not be used to make land use decisions for specific (small) tracts of land.

A soil survey published for Rhode Island in 1981 by the Department of Agriculture, Soil Conservation Service, identified over fifty soil classifications. Subsequent surveys have been made of the bedrock and surficial geology and of the ground water resources in the City. A generalized picture of these physiographic conditions reveals two distinct areas separated by the escarpment mentioned previously.

The eastern lowland is underlain essentially by glacial outwash, which rests upon sedimentary rocks of Pennsylvanian age, whereas the western upland is underlain essentially by glacial till, which rests upon igneous and metamorphic rock of pre-Pennsylvanian age.

Glacial outwash is composed of oils which are fairly well sorted. They are permeable and they are the most productive water bearing soils in the City. Glacial till is generally unstratified, unsorted and compact. They are relatively impermeable.

Permeability is the degree to which water passes through soil. Sandy, loosely packed soils such as outwash have a higher permeability than dense soils such as glacial till and are better suited for on-site wastewater disposal. They also are a better source of groundwater. Conversely, high permeability can be undesirable if the rate of percolation is so fast that on-site sewage disposal causes groundwater contamination. Good permeability can be adversely affected by the presence of a high water table, that is, the depth to which water has completely saturated the soil. The areas of Warwick in which the water table is close to the surface (high groundwater areas) are generally along the shoreline in the north and northwest sections and also in the western parts of the City.

**Soil Development Potential -** The development potential of the soil is a combination of particle size, moisture content, drainage, erosion, areas of weak substructure, slope, depth to groundwater, and depth to bedrock. These

variables are rated in relation to the degree of limitation for certain uses and densities. The classifications are:

## Slight Limitations:

Relatively few limitations in terms of soil suitability for a particular use.

## **Properties:**

Excessively and soils. Texture varies from fine silt to sand and gravel conditions.

#### Moderate Limitation:

Relatively more difficult and more costly to correct natural limitations of the soil for certain uses.

# **Properties:**

Moderately well drained soils moisture in the Spring. Texture – loam and sandy drains with areas of moderate to excessive stone subject excessive water.

## **Severe Limitations:**

Require extensive and more costly measures to overcome the soil limitations - some areas not feasible for a specific use.

## **Properties:**

Nearly level, very poorly drained soils in depressions and small drainage ways - seasonal high water table at or near the surface from late fall through midsummer makes these soils poorly suited to community development, especially in the absence of municipal sewer facilities.

## **Farmland**

Soils suitable for agricultural purposes are found throughout the City, but active farms are limited. Approximately 12 farms, containing 715+/- total acres with 491 acres in production still exist in Warwick. The largest farm is 348 acres. Farms produce Christmas trees, corn, hay, nursery stock, vegetables, rabbits, beef cattle, pastures, among other items. Horse stables are also located in Warwick.

Among the farms in Warwick are the Morris Farm on Warwick Avenue, Foster and Barton Farms on Centerville Road, Allen Homestead on Toll Gate Road, Rice Farm on Commonwealth Avenue, Budlong Farm on Buttonwoods Avenue, Cole Farm on Cole Farm Road, Clouds Hill Farm (Reed Estate) on Post Road, Confreda Farm on Airport Road and the Dawley Farm on Cowesett Road.

#### Wildlife

In a mature suburban city such as Warwick, most of the native wildlife has disappeared or has dwindled to very low populations. There are, however, several areas in the City which support wildlife, primarily birds and aquatic life.

The most important of these are the coastal and freshwater wetlands, salt and fresh water marshes, streams, ponds, and the Bay. Marshes,

in addition to their value for flood control and water resources management, provide excellent sources of food for aquatic life, birds and waterfowl. Upland woodland, particularly in the south western sections of the City which remain undeveloped provide valuable habitat for fox, deer and a wide variety of more commonly observed mammals and birds.

All of Warwick's wetlands provide valuable wildlife habitat, but several are more important, even unique, in providing a rare ecological phenomenon in such a highly developed area. Highest on the list of wildlife habitats is Buckeye Brook and its attendant marshlands. The brook provides a means for herring to "run" upstream each spring to spawn in Warwick Pond. The marshlands along Mill Cove support a large amount of aquatic life and are one of the City's best shelters for ducks. Mary's Creek is one of the premier shellfish habitat areas in the state. Brushneck Cove and Baker's Creek Marsh provide significant areas for waterfowl feeding, resting and cover.

The Potowomut River and environs also provides a large estuarine habitat for a wide variety of marine and upland wildlife.

The following locations in particular have been

identified as having value as wildlife habitat:

NAME WILDLIFE VALUE

Buckeye Brook/ Mill Cove Herring run, aquatic life, Wood and Black Ducks

Warwick Pond Various fish, snapping turtles

Potowomut River Herring run
Rock Island Fossil site, birds

Passeonkquis Cove Ducks, scaup, widgeon

Gorton's Pond Smelt run, freshwater fish (various types)
Occupasstuxet Cove Waterfowl, shell and finfish, upland birds

Marsh Point, Baker's Creek
Upland birds, shell and finfish
Mary's Creek
Shellfish, waterfowl, finfish

Conimicut Point Shellfish, saltwater fish, (Narragansett Bay)

Tuscatucket Brook & Pond, Sand Pond,

Three Pond Brook, City Park Waterfowl, freshwater fish

Pawtuxet River

(especially lower reaches) Waterfowl, birds

Sources: The Wetlands of Warwick, Rhode Island, An Ecological Analysis and Evaluation, Ecological Associates, Inc., 1973.

Warwick Environmental Master Plan, 1973. RI Dept. of Environmental Management, 1993, inter-office memo, July 10, 1992, Environmental Coordination Division.

## **Rare and Endangered Species and Habitats**

The historical and current status of species of plants and animals suspected of being rare or declining has been monitored for the past decade by the Rhode Island Natural Heritage Program (NHP). There are approximately 35 species of plants and animals in Warwick which the NHP has catalogued. Species are assigned to one of seven status categories. The Federally Endangered and Federally Threatened species are given the highest status in regard to protection, followed by State Endangered, State Threatened, State Interest, Species of Concern and State Extirpated species. There are no known Federally Endangered or Federally Threatened species in Warwick. However,

there are a number of state status species in the Town, a list of which is maintained at the Rhode Island Natural Heritage Program office at RIDEM.

The NHP has inventoried habitats where rare species are found and have made management recommendations to ensure their continued survival in those habitats. Sites of particular interest in Warwick include the following (see Figure 3 on following page):<sup>2</sup>

 Greene Farm - located on the Hunt River, this site is comprised of approximately 150 acres of open fields and farmland, and dry oak/mixed woodlands. The frontage on Hunt River and several small streams, and the inclusion of four small ponds provide varied

riparian and lacustrine habitats. This site is presently protected by purchase of development rights by the State.

- 2. The lower reaches of the Pawtuxet River provide some of the only remaining habitat for wildlife in a primarily urban area. The floodplain forests and associated river stretches are critical habitat for waterfowl, songbirds, other aquatic mammals and various reptiles and amphibians. Protection would involve establishing river buffer zones and control of pollutants entering the riverain system.
- 3. Wetlands adjacent to the Three Ponds complex provide habitat for the State-listed Sora Rail. Fewer than 10 populations of this species are known statewide and its numbers are continuing to decline, primarily due to habitat destruction. The present configuration of the cattail marsh along with open water at this site favors the presence of not only the Sora, but other noteworthy species, including the Virginia Rail. The site has already been subjected to repeated alteration, and if possible, development should be directed toward other, more distant, areas.
- 4. Gorton Pond is an example of a rare community type, the coastal plain pondshore. The sandy shorelines support rare flora adapted to the naturally fluctuating water levels. More inventory work is needed in this area, as many of the rare pondshore plants are only seen in years of low water levels, when the shorelines are exposed.
- Apponaug Cove and Occupasstuxet Cove are known to be significant wintering areas for black ducks and other species of waterfowl. Of particular importance are the marshes and extensive mudflats in the back

areas of the coves.

All of the sites listed above would benefit from additional protection in the form of protective zoning, placement of conservation restrictions, redirecting intensive development, establishment of buffer zones and other activities.<sup>3</sup>

## Fresh Water Resources

The City of Warwick lies totally within the Narragansett Bay drainage basin. Two major rivers drain the City's land area into the Bay, the Pawtuxet River to the north and the Hunt (Potowomut) River to the south. In addition to these two major drainage courses, a series of smaller streams and stream systems empty directly into Narragansett Bay. The following is a summary of the major drainage network of Warwick:

- a. Pawtuxet River Basin
- Three Pond Brook
- Cranberry Bog Brook
- Local unnamed streams
- b. Hunt (Potowomut) River
- c. Local watercourses flowing into Narragansett Bay
- Muskarchugg River and Dark Entry Brook (to Greenwich Cove)
- Hardig Brook (to Apponaug Cove)
- Tuscatucket Brook (to Brush Neck Cove)
- Parsonage, Warner, Buckeye and Lockwood Brooks (to Mill Cove)

- d. Small local streams (including u nnamed)
  - Capr on Farm Creek
  - Baker's Creek
  - Mary's Creek
  - Foster Brook

Rounding out the water and wetlands system in the City are several fresh water marshes and ponds. The ponds dot the lowland plains area that make up most of central Warwick and were created by glacial action. Many small glacial depressions are generally dry, but those that are larger and deeper have filled with water, probably due to surface outcrops of the water table. These ponds are:

- Gorton's Pond
- Little Pond
- Warwick Pond
- Sand Pond

- Posnegansett Pond
- Spring Green Pond

Inland Wetlands - Table 2 lists the approximate acreage of freshwater wetlands in Warwick, as identified by the Rhode Island Geographic Information System (RIGIS). These include wetlands of at least 1/4 acre in size, and wetlands with salinity less than 0.5 parts per thousand. Of the total 3,363.6+/- acres of wetland, approximately one third are freshwater wetlands. Freshwater wetlands of particular importance include wetland along the Three Pond Brook system, Peat Bog and wetlands along Warwick Neck:

Table 2
Freshwater Wetlands in Warwick

Wetland Type	Acres
Riverain Nontidal Open Water	181.17
Lacustrine Open Water	162.65
Palustrine Open Water	207.69
Emergent Wetland: Marsh/Wet Meadow	162.81
Scrub-shrub Wetland: Shrub Swamp	336.37
Forested Wetland: Coniferous	12.43
Forested Wetland: Deciduous	154.81
Total Inland Wetland Area	1,217.94

Source: Rhode Island Geographic Information System, 1990.

**Pawtuxet River** - While its water quality has

been degraded in recent years due to intensive

development of the land surrounding it, the Pawtuxet River provides open space and recreational opportunities, and wildlife habitat. The Lieutenant Governor's Task Force on Rivers, in a 1989-draft report, found that "the present condition of the Pawtuxet is most sad in light of the fact that the river had an outstanding ability to support a variety of recreational activities.

During the turn of the century, canoeing was such a tremendously popular activity. Numerous canoe clubs built boathouses along the banks of the Pawtuxet. In fact, a photo section, which appeared in the Providence Board of Trade Journal during August of 1914, concluded that 'next to the Charles River in Boston, it is quite probable that there are more canoes on the Pawtuxet River than on any other American river of comparable size.' The canoe clubs, which were abandoned during the Great Depression, have never been rebuilt."

Attempts are currently underway by the Cities of Warwick and Cranston and the Town of West Warwick to improve the water quality by upgrading the regional wastewater treatment facility to the tertiary treatment level. In addition to this effort, the City should also encourage

wider recreational use of the river, should coordinate with the other watershed communities in developing an appropriate approach for river management, and should review its stormwater management and development regulations to ensure that they provide suitable protection from pollution. The Pawtuxet River Authority coordinates the efforts of the five river communities, and Warwick should continue to work with the Authority in its efforts to improve the river's quality.

Hunt River Aquifer - While the City draws most of its drinking water from the Scituate Reservoir, it also shares a significant potable groundwater resource with neighboring communities. This groundwater resource is the Hunt River Aquifer system (See Figure 4 on following page).

The Hunt River Aquifer System is located along the border of the City of Warwick and the Town of North Kingstown, and is also shared with the Town of East Greenwich. Its significant water yielding deposits consist of: moderate to highly transmissive (+80,000 gpd/ft) glacial outwash/ice contact deposits, which are situated in an area of about 3½ miles long and ½ mile in width beneath and adjacent to the Hunt River. Saturated

overburden thicknesses of 80 to 100 feet are present in the bedrock valleys, which underlay the areas.

Similar materials of shallower depths, and thus lower transmissitivity, surround these deposits. To the west, these materials abut glacial till. Till deposits have very low relative water yielding characteristics. To the south, the transmissive deposits extend a distance of over 5,000 feet, eventually merging with the Annaquatucket and Pettasquamscutt Aquifers.

The groundwater resources present within the aquifer and surface flow within the Hunt River are naturally derived from precipitation within the Potowomut watershed. A number of brooks carry precipitation runoff and groundwater discharge to the river, from over twenty square miles of upland located to the west within East Greenwich, to the Hunt River. Precipitation runoff is also contributed to by a much smaller area of about two square miles to the east in North Kingstown and a small section of Warwick to the northeast. Water is introduced to the aquifer both through direct infiltration of precipitation and through flow of groundwater from the till covering uplands and abutting shallow outwash deposits.

The Kent County Water Authority presently maintains wells that draw from the aquifer. The viability of the aquifer as a drinking source is threatened by continuing development in the watershed. Land development poses a serious threat to this resource due to the proliferation of on-site septic systems, use of herbicides, insecticides and chemical fertilizers in residential landscaping, and the presence of underground storage tanks (UST's). In response to these threats, a Wellhead Delineation Study Committee was formed with representatives from the affected communities and water service providers to study the aquifer and the impact of developing land use patterns on this resource. The committee funded a Wellhead Delineation Study Protection Plan and prepared GeoEnvironmental Inc. (GZA). Elements of the effort were funded through a grant from the United States Environmental Protection Agency (EPA) administered by the City of Warwick. The objective of this study was to provide East Greenwich, North Kingstown, and Warwick, and the water companies serving these communities, with the tools and information needed to protect the water supply while balancing the needs of all concerned. Output of the study:

Identified wellhead protection areas at

seven existing and one proposed well site.

- Provided legally defensible information and suggested regulatory language to the three municipalities for the implementation of land use regulations.
- Provided prioritized guidance for future acquisition of land to better protect groundwater quality.
- Assisted in identifying existing sites, which represent potential sources of groundwater contamination.
- Helped establish and document how groundwater withdrawal practices at one location will influence flow in the river and availability of groundwater at other locations.
- Formed the basis for implementing public education and other non-regulatory programs.

As continuing population growth statewide puts ever increasing demands on established surface water sources (such as the Scituate Reservoir) the need to preserve groundwater resources is critical to the future development of Rhode Island communities. The loss of these resources due to contamination would severely limit these communities ability to provide these residents with safe and adequate drinking water supplies.

#### Coastal Resources

Many of the above-noted freshwater resources feed or drain marshes, bogs, swamps, or terminate in salt marshes at the tidal shoreline. The 1980 "208" Water Quality Management Plan for Rhode Island identifies 260 acres of salt marsh in Warwick which provide food and shelter for juvenile fish, shellfish habitat, shorebird and waterfowl habitat and serve as natural erosion and flood control mechanisms.<sup>4</sup>

Table 3 lists the approximate acreage of coastal wetlands in Warwick, as identified by the Rhode Island Geographic Information System (RIGIS). These include wetlands of at least 1/4 acre in size, and wetlands with salinity greater than or equal to 0.5 parts per thousand.

Table 3
Coastal Wetlands in Warwick

Wetland Type	Acres
Riverain Tidal Open Water	1,319.06
Estuarine Open Water	394.59
Marine/Estuarine Rocky Shore	6.20
Marine/Estuarine Unconsolidated Shore	147.97
Estuarine Emergent Wetland	277.20
Estuarine Scrub-shrub wetland	0.65
Total Coastal Wetland Area	2,145.67

Source: Rhode Island Geographic Information System, 1990.

Of the total 3,363.6+/- acres of wetland in the City, approximately two-thirds are coastal wetlands. Coastal wetlands of particular importance include:

Mary's Creek
Capron Farm Creek
Mill Cove
Greenwich Cove
Marsh Point
Buttonwoods Cove
Baker's Creek

Brush Neck Cove Conimicut Point

Gaspee Point

Passeonkquis Cove

**Coastal Features -** Warwick offers approximately 39 miles of shoreline, divided among a variety of conditions and ownership patterns. The majority of the City's shoreline is privately owned. Eleven+/- miles of shoreline is publicly owned, and divided among City, state

and federal properties, with the City holding the most frontage.

For the most part, Warwick's shoreline is marshy or sandy. Marshland is especially prominent along the coves, in addition beach land and shoreline, which has been reinforced by walls or revetment, are commonly found along the exposed shoreline of the Bay. Bluff areas are those shoreline areas elevated significantly above water level offering scenic vistas of the Bay and adjacent shoreline.

They also provide good protection from storms and erosion, and excellent recreational opportunities. These are found mostly in the northern portions of the City and in Potowomut.

Barrier beaches are an important feature of

Warwick's coastline, serving as buffers against storms and offering a unique and valuable coastal environment.<sup>5</sup> Undeveloped barrier beaches in Warwick include: Marsh Point, Baker's Creek, Buttonwoods Cove, Gaspee Point and Conimicut Point. Development along barrier beaches can degrade the natural functions of these resources. These areas should be preserved for recreational use by residents, and for their value as scenic resources and storm control.

Coves and Bays - Warwick's saltwater coves and bays provide ample habitat for finfish and shellfish, the most significant of which is the winter flounder.<sup>6</sup> Although the resources are available for commercial finfishery, Warwick's waters have been off limits for more than 20 years.<sup>7</sup> Commercial fishing is limited to restricted seasonal trawl fishery in the "Upper Bay" (Narragansett Bay between Warwick Neck and Conimicut Point) and seasonal baitfishery for menhaden.

The "Upper Bay" and Greenwich Bay are two of the State's most important shellfishing areas, producing most of the quahogs harvested from Narragansett Bay. These areas are regulated by the Rhode Island Department of Environmental

Management which designates them as polluted, conditional or seasonal closure areas, or as approved shellfishing areas.

In December 1992, the Rhode Island Department of Environmental Management (RIDEM) temporarily closed Greenwich Bay due to high levels of fecal coliform. Realizing the implications of this condition to the environment and to the use and enjoyment of this coastal resource, the City drafted a "Greenwich Bay Reclamation Plan" (Department of Planning, August, 1993) which has as its focus the following:

- assessment of physical conditions existing in and around Greenwich Bay;
- impacts of these conditions on Bay water quality;
- areas of concern which contribute most to pollutant loading of neighboring water bodies;
- recommendations to remediate existing problems.

The study discusses twenty-three subareas in terms of physical characteristics, population and housing density, and marine activity. Conclusions are provided and areas of concern (hot spots) identified. These include portions of Arnold's Neck, Chepiwanoxet, Nausauket, Buttonwoods, Oakland Beach and WarwickNeck.

The study also included a discussion of the roles and responsibilities of the institutional

stakeholders in the Greenwich Bay water quality cleanup effort. A series of recommendations address wastewater management, database management, research and development, communications, coastal management, land use management and plan enforcement.

## **Water Quality Classifications**

The RI Department of Environmental Management, Division of Water Resources, has classified water quality conditions in Warwick's waters. The latest regulations were promulgated on September 29, 1988. Fresh water classes

- Class A Suitable for water supply and all other water uses; character uniformly excellent.
- Class B Suitable for bathing, other primary contact recreational purposes, agricultural uses, industrial processes and cooling; excellent fish and wildlife habitat; good aesthetic value; acceptable for public water supply with appropriate treatment.
- Class C Suitable for fish and wildlife habitat, boating, secondary contact activities, and industrial processes and cooling; under some conditions acceptable for public water supply with appropriate treatment; good aesthetic value.
- Class D Suitable for navigation, power, certain industrial processes and cooling, and migration of fish; good aesthetic value.
- Class E Nuisance: unsuitable for most uses.

Classes D and E are used to describe an existing condition only, and are not considered an acceptable goal for classification of any water. Salt water classes are:

Class SA Suitable for all seawater uses including shellfish harvest for direct human consumption (approved shellfish areas), bathing and contact recreation and fish and wildlife habitat.

Class SB Suitable for bathing, other primary contact recreational activities, and shellfish harvesting for human consumption after depuration; fish and wildlife habitat.

Class SC Suitable for fish and wildlife habitat; suitable for recreational boating and other secondary contact recreational activities, and industrial cooling; good aesthetic value.

Class SE Nuisance; unsuitable for most uses.

Much of Warwick's waters are classified B or C.

The lower Pawtuxet River is classified as Class
D. Apponaug Cove and Greenwich Cove have
water quality classifications of SC, while both the
lower portion of Apponaug Cove and the upper
portion of Greenwich Cove are classified as SB.
The remainder of Greenwich Bay, as well as
Brush Neck and Buttonwoods Coves are rated
as Class SA, the highest water quality rating.

# **Key Environmental Assets**

Shoreline - the City has about 39 miles of coastal shoreline offering beach, bluff and marshland conditions. It has eight navigable coves, extensive marina and recreational facilities as well as areas of undisturbed natural

beauty.

Water Bodies - Warwick has many ponds, rivers, streams and inlets which act as natural drainage courses, provide shelter for various flora and fauna and give the City excellent scenic and recreational opportunity.

Wetlands - Despite its developed condition, there are many coastal and inland bogs, marshes and swamps in the City which are undisturbed, and which are essential for wildlife habitat and the performance of various natural processes.

Open Spaces - In 1985, approximately 4,800 acres of land in Warwick were undeveloped, and growth since then has rapidly converted vacant land to urban uses. Adequate open space must be preserved to contribute to the open natural appearance of the City.

Vegetation- The availability of wooded areas and landscaped spaces provide an attractive setting for residential areas in the City, as well as providing habitat for wildlife, preventing erosion, enhancing water quality and screening urbanizing areas.

Wildlife – Warwick has many natural species of wildlife, including birds, fish and game. There are a number of state endangered species in the City.

#### **Key Environmental Liabilities**

a. Noise Pollution - High levels of noise from the T.F. Green State Airport has been a consistent liability. The overall level of noise from the airport is expected to rise in the future as an attribute of increased air traffic. Noise pollution is also a product of road and highway traffic, especially from busy arterials, the interstate highway system and AMTRAK mainline. These noise generators are disruptive of the aesthetic value of the surrounding and neighboring land uses.

- Air pollution Air pollution is another major liability in the City resulting from air traffic at T. F. Green State Airport and heavily traveled highways, arterials and congested intersections.
- c. Water Pollution - The pollution of Warwick's waterways has been occurring since the beginning of industrial development along the Pawtuxet River, the practice of agriculture and the development of roadways and home sites. The Pawtuxet River is the most significantly polluted waterway. While its pollution sources begin in upstream communities. both Cranston Warwick contribute pollutants to the river. Sources of pollution include runoff from the urban development, wastewater treatment facility discharges from three treatment facilities. leachates from landfills. industrial discharges, and individual septic disposal systems.

## **CHAPTER 4**

## RECREATION PLANNING PROCESS

# Responsibilities

The Department of City Plan has sole responsibility for the preparation of the City's short and long range plans. The Department of Parks and Recreation is responsible for the development and implementation of recreational programs and the maintenance of recreational facilities and equipment. A planner from the Department of City Plan is assigned to work with the Recreation Department.

The Department of Parks and Recreation oversees the use of recreational facilities throughout the City. These include playgrounds and play fields directly under the jurisdiction of the Department of Parks and Recreation, as well as related facilities under the jurisdiction of the School Department. The latter maintains school related recreational facilities while the Department of Parks and Recreation maintains all others.

The preparation of the Recreation Plan is a function of the Department of City Plan working in conjunction with the Department of Parks and Recreation, concerned interest groups and the Comprehensive Planning Advisory Task Force. This plan update is designed to meet the requirements of Rhode Island State Planning Council Recreation Resources Review Committee and the Rhode Island Comprehensive Planning and Land Use Regulation Act. Standards and Guidelines for each were published in June 1989 as Standards for Local Recreation, Conservation, and Open Space Plans and Handbook Number 16, Handbook on the Local Comprehensive Plan.

## **Past Recreation Planning Efforts**

Warwick adopted its first recreation plan in 1964. Entitled the Master Plan for Recreation, Open Space and Waterfront, it addressed (1) future land acquisition needs, (2) capital investments, (3) immediate development requirements, and (4) retention of open space

for public and private recreation. The plan established recreational development goals, standards for recreation facilities based on the National Recreation Association, it proposed areas for open space, conservation, and waterfront development, and it outlined a

program for action. The plan created seven recreation-planning districts in the City for the purpose of needs analysis and for allocating resources for facility development.

In 1973 the City adopted the Environmental Master Plan. This plan focused on the environment but it was a recreation and open space plan and it contained a waterfront element. It recommended that the City place a greater emphasis on coordination between indoor and outdoor recreation activities and it emphasized open space acquisition. It also included a waterfront development and conservation plan that classified the City's coves for conservation, moderate development and more intensive recreational development. These classifications were based on the natural resource characteristics and historic uses of the coves. The plan also adopted the National Recreation Association standards for facility size and distribution. It continued the use of planning districts for the purpose of needs analysis and facility development but it revised the districts somewhat by adding an eighth district.

The National Park Service of the U.S. Department of Interior in the early 1980's managed the Urban Parks and Recreation

Recovery Program, which was designed to stimulate and support local commitments to the recreation system. The program focused on improving management, delivery and maintenance of the system and facilities and to restore deteriorated facilities. The City of Warwick participated in this program and in 1982 adopted its Recreation Recovery Action Program. This program retained the eight planning districts adopted by the 1973 plan. It also adopted definitions for facilities and assessed the needs of each planning district and the distribution of facilities throughout the City.

A complete inventory of facilities was performed, recommended improvements were ranked according to priority and improvements were scheduled for implementation.

## Preparation of the Plan

This Natural Resources, Open Space and Recreation Plan has been developed through the Department of City Plan working with the Comprehensive Planning Advisory Task Force and with input from the Conservation Commission and the Department of Parks and Recreation. The requirements for the conservation of natural resources, preservation of open space and provision of recreational

opportunities mandate the following components:

- 1. Inventory of existing open space and recreation facilities, including consideration of access to such areas;
- 2. Needs analysis, including forecasted needs of the local population for open space/ recreation opportunities;
- 3. Development of municipal policies for the provision, management, and protection of open space/recreational opportunities; and
- 4. Implementation program designed to achieve local open space goals and to meet forecasted needs.

Additional concerns expressed by the Task

Force members were:

1. Importance of maintaining existing parks and facilities;

- 2. Need to establish minimum parcel size definitions to maintain funding eligibility;
- Need to continue to investigate additional land acquisition for purpose of conservation;
- 4. Possibility of acquiring sensitive archaeological sites for conservation purposes;
- 5. Importance of identifying and maintaining public rights-of-way to the shore;
- 6. Need to identify and maintain public access to freshwater bodies.

#### CHAPTER 5

#### OPEN SPACE AND RECREATION INVENTORY

This inventory provides information on recreational facilities, conservation and open space areas and farmland. The inventory includes facility names, locations, type, presence of beach area, support area, facilities, permanent open space, ownership, service area and capacity, and comments, if any. Tables 4, 5 and 6 (see following pages) present the inventory data.

# **Protected Open Space**

The following is an inventory of open space parcels that have been acquired and placed in the City's inventory of permanent open space because they are wetlands, they protect known acquifers and/or support wildlife habitat. In 1988, the City's new zoning ordinance included a district designation for open space. Within this district, public lands that are set-aside for conservation and recreational purposes are zoned open space.

- George Street Property: 13 +/- acres adjacent to Belmont Park on the Pawtuxet River. An important floodplain for the Pawtuxet River provides a wetland system for many flora and fauna.
- Hunt River Property (Potowomut):
   Adjacent to the Hunt River, 10.07 acres.

   Purchased as open space provides protection for the Hunt River aquifer, which provides water to several communities.
   The EPA considers this aquifer a sole source aquifer. This parcel also contains

wetlands, uplands and open field habitats.

- Heights Avenue: 3.605 acres adjacent to Mill Cove. This parcel connects to a City-owned greenbelt extending all the way to Sandy Lane, and provides an excellent wildlife corridor to Mill Cove, which is deemed Type 1 waters by Coastal Resources Management Council (conservation area).
- Plat 217, Lot 1: Between Green Bush Road and Gilbert Stuart Drive. A wetland abutting a riverine system also provides a residential buffer.
- Plat 238, Lot 56: Located between Diamond Hill Road and Rt. 95, this site comprises about 9.96 acres.
- Plat 246, Lot 321: A 7.5-acre parcel located northwest of Little Gorton's pond and west of Greenwich Avenue. This parcel is a diverse wetland supporter of large amounts of freshwater habitat.
- Plat 248, Lot 139: A 14.9 acre parcel located north of Centerville Road and west of Interstate 95.
- Plat 250, Lot 55: 4.854 acres of wetland

adjacent to an unnamed stream. Provides excellent habitat for a variety of flora and fauna within a moderately developed residential area.

- Plat 288, Lot 14: 4.63 acres located adjacent to the Pawtuxet River and Pasadena Court.
- Plat 294, Lot 90: 4 acres bounded by Post Road to the north and Atlantic Avenue to the west.
- Plat 294, Lot 235: 4.70 acres located north of Narragansett Avenue and east of Cushing Road. This area is mainly a wooded wetland located in dense residential community.
- Plat 295, Lot 391: 14.264 acres located north of Post Road and east of Elmwood Avenue. This parcel is a bog and an associated wetland. This area is an excellent habitat for a variety of wildlife. This wildlife habitat is located within a densely developed residential community.
- Plat 298, Lot 289: 8.85 acres located south of Post Road and east of Sand Pond Road.
- Plat 299, Lot 195: 16.0 acres located west of Fairfax Drive, south of Post Road and adjacent to un-named stream.
- Plat 301, Lot 375: 13.03 acre north of Country Club Drive and east of Monroe Street.
- Plat 329, Lot 345: 6.51 acres west of Duluth Avenue and north of Woodstock Drive.
- Plat 341, Lot 1: 10.50 acres located northwest of Sandy Lane and southwest of

Cedar Swamp Road.

- Plat 354, Lot 33: This parcel is 13.94 acres located southeast of West Shore Road and south of Draper Avenue. The parcel largely contains a dense mixture of soft and hard wood trees. The parcel also contains a large amount of wetland vegetation.
- Plat 371, Lot 4: 33.71 acres bounded by Brushneck Cove to the north and Asylum Road to the south.

# **Unprotected Open Space Resources**

As a mature urban community, Warwick has a finite supply of open space that will rapidly be exhausted if steps to retain that open space are not taken now. Among the options that should be pursued are outright acquisitions, acquisition of scenic easements and purchase of development rights.

The following properties have been identified as major scenic, historic and environmental assets to Warwick. All identified sites are at present threatened by development. Development of these parcels would represent a significant loss to the community through the loss of open space, wildlife habitat, historic/archaeological resources, farmland, and coastline. Properties were selected based on the following criteria:

## **Environmental significance**

- Wildlife habitat;
- Vegetation;
- Recreational value;

#### **Aesthetics**

#### **Parcel Location**

- Area density:
- Development patterns;
- Development pressures;

## Geophysical

- Topography, geology, hydrology;
- Aquifers and surface water bodies;
- Soils constraints; and,
- Wetlands and coastal resources.

## Morris Farm, Warwick Avenue

(Plat 352, Lot 9)-One of the few remaining undeveloped parcels in the Oakland Beach area, and a 37 acre active farm. The area was characterized as rural prior to the end of World War II, with several chicken and truck farms. In the post war era, the area saw radical change as farmlands were rapidly converted to residential subdivisions. While development has currently slowed, this farmstead is still threatened by development pressures, which could become more acute with an upswing in the regional economy. Access via Warwick Avenue.

Foster and Barton Farms, Centerville Road (Plat 250, Lot 1 & Plat 251, Lot 18)-Active farms located close to the Route 2 commercial corridor, with high potential for development. The 136+ acre properties contain 18th and 19th century farmhouses and extensive pasturage.

## Allen Homestead, Toll Gate Road

(**Plat 247, Lot 8**)-Inactive farm of approximately eight acres located adjacent to Kent County Hospital complex. Contains a notable 19th century Italianate farmhouse.

The Land possesses significant scenic assets. Area has seen significant development in recent years with the proliferation of medical professional office space along Toll Gate Road. Site is currently threatened by development and neglect. Access via Toll Gate Road.

## Rice Farm, Commonwealth Avenue

(Plat 247, Lot 8)-Approximately 14 acre site containing a mid-18th century farmhouse. Property was owned by Emmanuel Rice in the early 1800's. The approximately 14 acre farmstead is part of a rapidly dwindling resource of open space in the Toll Gate area. Access via Commonwealth Avenue and Leon E. Whipple Road.

## **Budlong Farm, Buttonwoods Avenue**

(Plat 369, Lot 111)-Located west of the private community of Buttonwoods, this 57+-acre site contains a ca. 1700 farmhouse. The farm was first settled by John Budlong about 1700, and remained in Budlong family ownership until the death of Henry Warner Budlong in 1929. Farm now functions as a riding stable.

Significant development in this area combined with the farm's waterfront location makes this a prime development parcel. Access via Buttonwoods Avenue.

## Cole Farm, Cole Farm Road

+ acres located in the Conimicut area of Warwick. Originally was the site of a 17<sup>th</sup> century farmstead constructed by Deputy Governor John Greene, Jr. after the end of

King Phillip's War in 1676. The site was called

Occupasstuxet, translated from the Indian

(Plat 315, Lots 123, 36 and 136)-Thirty-nine

language as "meadow through which the river flows." While Warwick has over 39 miles of

coastline, most of this is in private ownership.

Acquisition of this property would improve public access to the water while also preserving

one of the last large open areas in Conimicut.

Site also contains significant archaeological resources that would be lost if the site was developed. Access from West Shore Road via Cole Farm Road.

Beagle Club, Cowesett Road-Private hunting club of approximately 95 acres located west of Sparrows Point senior housing complex. While Cowesett still contains significant parcels of developable land, recent subdivision activity points to a trend of rapid land consumption. Since the City owns little property in this section of Warwick, any opportunity to acquire conservation and recreational land in this area should be aggressively pursued. Access via Cowesett Road.

Aldrich Estate, Warwick Neck Avenue-

Former estate of the late Senator Nelson Aldrich, now the Our Lady of Providence Seminary. Eighty-four acre estate contains a superb collection of French Provincial and Gothic style buildings. Persistent rumors that the Providence Diocese may close the seminary and sell the property. Waterfront location in Warwick Neck means that this is a prime development site that would probably be carved up into house lots if it comes onto the market. Such development would destroy the integrity of the estate's site plan

and would probably result in the loss of some, if not all of the significant buildings on the site.

Access via Warwick Neck Avenue and Aldrich Avenue.

Alfred A. Reed Estate, Post Road-Located in the Cowesett section of Warwick, the 44.7 acre Reed Estate is one of the grand country retreats built by prominent Rhode Island industrialists in Warwick during the latter half of the 19th century. As a result of post-war suburban development, several of these large estates have been subdivided into house lots. The Reed Estate, also known as Clouds Hill Farm, is a noteworthy exception. Presently the home of a riding academy, the estate is still largely intact and is still graced by an impressive stone mansion built in the 1870's, and designed by Providence architects Walker and Gould. While presently not threatened, the estate's grand views of Narragansett and Greenwich Bays could make it vulnerable to development. Access via Post Road and Love Lane.

# Confreda Farm, Airport Road (Plat 311, Lot 191, Plat 312, Lot 10)-Active farm partially within the clear zone for T.F. Green State Airport's main runway.

**Dawley Farm, Cowesett Road-**Active farm.

Parcels abutting the Pawtuxet River (east of Belmont Park to bridge); formerly Warwick Industrial Track (United Electric Railway Trolley Line). Potential to provide greenway opportunities to Pawtuxet Village.

Selected parcels in Rhode Island Farm, Farm and Open Space Program. There are a total of 85 parcels included in this program. These sites are included in the program for 15 years, and can be sold at any time with a penalty. Specific parcels targeted for protection include:

Plat 218, Lot 1 (13.7 acres) - access via Abigail Street and Gilbert Stuart Drive; Plat 222, Lot 3 (9.9 acres) - access via Love Lane; Plat 226, Lot 4 (33.9 acres) - access via Major Potter Road; and, Plat 231, Lot 4 (20.6 acres) - access via Cowesett Road.

Assorted small vacant land holdings prominently located along Sand Pond which provide excellent access to a water body in a highly dense area.

The shore and waters of the:

Pawtuxet River; Three Pond Brook; Hardig Brook; Hunt River; Potowomut River; Passeonkquis Cove;

Warwick Pond;

Buckeye Brook;

Gorton's Pond;

Mill Cove:

Occupasstuxet Cove;

Tuscatucket Brook and Pond:

Baker's Creek;

Mary's Creek;

Sand Pond;

Greenwich Cove:

Brook feeding Apponaug Cove; and,

Cranberry Bog Brook.

Undeveloped, environmentally sensitive portions of:

Chepiwanoxet Point; Rock Island; and, Marsh Point.

#### **Waterfront Recreation**

Warwick's coast includes 39 miles of shoreline, eight coves, Greenwich Bay, Narragansett Bay and the Providence River.<sup>8</sup> The coves include:

Potowomut River - between North Kingstown and Warwick Greenwich Cove - area of Warwick's waters west and south of a line between Chepiwanoxet Island and Long Point Apponaug Cove - area northwest of a line that runs from Cedar Tree Point to the end of the breakwater at Masthead Marina

Brushneck/Buttonwoods Cove - area northwest of a line that extends from the tip of Buttonwoods to Strand Avenue Warwick Cove runs from the end of Bay Avenue to the Warwick Neck shore Occupasstuxet Cove - area west of a line that runs from the southerly point of Gaspee Point to Greene Island and then westerly to a point on the shore where Dudley Avenue ends

Passeonkquis Cove - area westerly of a line that runs from Bay Shore Boulevard to Gaspee Point

Pawtuxet Cove - area west of a line that runs from Pawtuxet Neck to the tip of the sheltering dike and is enclosed by the dike and causeway on the east and south

Harbor facilities in Warwick consist of public private and commercial marinas, yacht clubs and boatyards, docks, wharves, boardwalks, launching ramps and other similar uses. There are nineteen marinas, boatyards and yacht clubs operating in the City, containing over 2,500 slips (see Table 4).

Table 4
Inventory of Commercial Marinas - City of Warwick

Cove/Marina	Boat Slips			
Potowomut River	None			
Greenwich Cove				
East Greenwich Yacht Club	50			
Norton's Shipyard and Marina	160			
Apponaug Cove				
Apponaug Harbor Marina	200			
Ponaug Marina	110			
Brushneck/Buttonwoods Cove				
Little Rhody Yacht Club				
Warwick Cove				
Angels Marina	100			
Harbor Light Marina	160			
Nick's Dock	10			
Warwick Cove Marina	128			
Sound Marina	65			
Winsteads Dock	200			
C-Lark Marina	350			
Breezie Point Dock	50			
Carlson's Marina	170			
Wharf Marina	80			
Bay Marina	200			
Occupasstuxet Cove	None			
Passeonkquis Cove	None			
Pawtuxet Cove				
Pettis Marine Boat Yard	25			
Greenwich Bay				
Brewer Yacht Yard	240			
Masthead Marina	300			
Narragansett Bay	None			
Providence River	None			

Source: Harbor Management Plan, 1989-1993, City of Warwick, Rhode Island, Amended, March 1991, Pare Engineering Corporation.

There are approximately ten boat launching ramps located within the coves, in various states

of repair. Many of the existing ramps lack adequate parking for cars and boat trailers, as well as service facilities.<sup>10</sup> There are over 800 moorings, of which over 60 percent are permitted to private individuals.

Access to the City's shoreline is provided in two forms: 1) access points designated by the Rhode Island Coastal Resources Management Council (CRMC) as public rights-of-way; and 2) platted streets that end at the shoreline. 11 The actual accessibility to the shore varies significantly among the access points, and CRMC is continuing to examine the ownership of the ROW's. The Land Use Element of this Plan contains specific policies pertaining to shoreline access, and a list of rights-of-way is included in the City's Harbor Management Plan.

Shoreline recreation facilities are abundant in Warwick, and vary from Goddard Park, a major state facility, to Rocky Point Amusement Park, a private recreational area. Shoreline recreational facilities include 2 playlots, 1 playground, 4 major parks, 4 passive recreation areas, 5 public beaches, 3 private recreation areas, 3 private non-profit areas, 3 waterfronts, 3 undeveloped public lands, 4 miscellaneous facilities and 9 community beaches.<sup>12</sup>

The City's Harbor Management Plan was developed in the late 1980's to "ensure that the waters of the City of Warwick are enjoyed by all its citizens and users of its waters." It is a policy statement to guide the use and development of the City's waters and to establish guidelines for the implementation of harbor regulations. It is included by reference as part of this Plan.

## **CHAPTER 6**

## **NEEDS ANALYSIS**

This needs analysis is based on the existing inventory of public open space and outdoor recreation facilities in the City. These facilities come under the jurisdiction of either the Department of Parks and Recreation or the School Department. All recreation activities are coordinated by the Department of Parks and Recreation. For the purposes of this analysis the City is divided into eight (8) planning districts. These correspond to known neighborhoods and clusters of neighborhoods in Warwick. Each planning district includes the corresponding neighborhoods and census tracts. Each facility within each planning district is described in terms of type of facility, size, location and any particular characteristics that may affect the facility's use and accessibility to local residents.

The summary tables for each district compile the total acreage for each type of facility and compares them to standards established by the National Recreational Park Association (NRPA). The NRPA standards for City-wide and neighborhood recreation facilities and open space were adopted by the Rhode Island Recreation Resource Review Committee (RRRC) in June, 1989 for all local communities. The system is considered a planning guide for which various existing facilities are compared. For purposes of this plan the following types of facilities are considered:

Playlot - Small tot lots scattered throughout the City are intended to serve very young children and generally are considered a substitute for a single family residential yard. The service area of a tot lot is considered 1/8th of a mile. In Warwick, tot lots are generally found in conjunction with larger play fields, playgrounds, and sometimes with school facilities. It is rare that there are single isolated play lots in any part of the City. Since

Warwick is a suburban city with primarily single family houses on single lots with backyards, the need for playlots as described in the state standards are not as significant as it would be for denser inner city areas.

**Playground** - Playgrounds serve neighborhood children and are often associated with neighborhood schools. They are less likely to have organized play even though playgrounds

may include baseball, basketball, or other active sports facilities. Such facilities are often used for practice and pick-up play.

**Playfield** - Play fields are dominated by athletic fields and highly organized team sports. In Warwick, the most active team sports are baseball, softball, soccer, basketball, and football. Various leagues both privately organized or sponsored by the City agencies use these fields on a schedule basis through the Department of Parks and Recreation.

Recreation Area - Recreation areas do not fall into any of the above categories but are established specifically for recreation purposes. Examples of recreation areas are beaches, boat ramps, marinas and golf courses. In Warwick the most prevalent of these are either oceanfront or freshwater beaches.

Neighborhood Park - Neighborhood parks are passive recreation areas which do not have any type of facility for active play or recreation use. Neighborhood people may use it for informal play, picnicking, and strolling. In Warwick, historic parks and cemeteries are often characterized as neighborhood parks.

Large Park - Large parks are multi-purpose facilities that serve highly organized athletic play, passive recreation and conservation of natural resources. In Warwick, the two major examples are the City Park and the Mickey Stevens Sports Complex. Both of these are owned, operated, and maintained by the City. A third facility is Goddard Memorial State Park in Potowomut which is owned and operated by the State of Rhode Island. This facility also has regional significance since it draws visitors from throughout the Rhode Island. Although most neighborhoods do not contain city-wide facilities, City Park and Mickey Stevens Complex are centrally located and are accessible to most residents of the City of Warwick.

Quantitative guidelines, setting forth minimum acreage for the various categories of recreational facilities, were established by the NRPA for planning purposes only. The analysis which follows compares existing facilities in terms of number of acres per one thousand population to the standards established by NRPA. Generally the NRPA standards appear to apply to highly urban and dense cities and therefore tend to be fairly high in number. The most obvious example is the tot lots. As noted above, a City with many backyards does not tend to require many tot lots

to serve the needs of its residents.

These NRPA standards were developed in 1974 and updated in 1983. The later standards provided a range for communities to consider their own particular needs. For this of Parks and Recreation has followed a policy of providing facilities that can be used by residents of all neighborhoods rather than serving individual neighborhoods with their own site specific facilities. As a result, City-wide facilities such as the Mickey Stevens Sports Complex, other active playfields connected to the high schools, and other large playfields have been encouraged and developed. The Department of Parks and Recreation considers that most people who use these facilities either drive or are driven to the sites.

## **Planning District Analysis**

The following presents a summary of existing facilities and space, and an analysis of recreation space and facilities needs for each of the planning districts City-wide.

Planning District 1 Neighborhoods: Pawtuxet, Lakewood, Spring Green, Governor Francis, and Gaspee Plateau plan, both high and low figures are presented and compared to the City's existing conditions.

Over the past several years, the Department considers that most people who use these facilities either drive or are driven to the sites.

# **Census Tract(s):** 210, 212, and 213

Within this district, there are over 100 acres of local, 70+ acres of state and about 60 acres of private open space areas and recreation facilities. Many of the local recreation areas are connected with schools and therefore are under the jurisdiction of the school department. Programming activities are conducted by the Department of Parks and Recreation. The major local recreation facilities and open space areas in this district are as follows:

1) Aldrich School Field - Approximately 8 acres. This area is attached to the Aldrich Junior High School off Post Road and is accessed by Ralph Street. The facilities include two (2) tennis courts and a combination of two (2) soccer fields and one baseball diamond. There is unpaved parking of about 5,000 square feet to accommodate approximately 12 to 15 cars. The area includes some landscaping along the perimeter. Multi-purpose fields are difficult to maintain due to overlapping seasonal use and limited time for turf to regenerate. As a result, the City may consider turning this field into a single use.

- 2) Pawtuxet Park Approximately 2-1/2 acres off Narragansett Parkway. This facility includes boat ramp docking and a 16,000 square foot parking area for about 40 cars. The facility also includes a one-story building that has a meeting room and sanitary facilities.
- 3) Pilgrim School Playfield Approximately 10-1/2 acres. This facility is connected to the Pilgrim Senior High School and includes four (4) tennis courts, a football field with track, softball field, baseball/soccer field, bleachers, roads and parking.
- 4) Sprague Playfield Approximately 4 acres –located at the corner of Post Road and Lakewood Avenue. This facility includes a Little League field, basketball court and a tot lot area. There is a 15,000 square foot parking area for about 35 cars.
- 5) Whittaker Playfield Approximately 13 acres located at North Country Club Drive and Munroe Street. This facility includes a Little League Field, two (2) softball diamonds, two (2) basketball courts, one (1) tennis court and one (1) tot lot, playground equipment, and two (2) parking areas of approximately 22,000 square feet that can accommodate about 55 cars.
- 6) Adam Street Playground Approximately 2-1/2 acres located at Adam Street at Washington Street. This facility includes a basketball court, play equipment, and landscaping. There is no off street parking for this facility.

- 7) Arnold's Pond Beach (Posnegansett Lake)-Approximately 2/3 of an acre. This beach facility is located along Warwick Avenue facing the lake. It includes one hundred linear feet of beach area, trees and shrubs. There are no off street parking spaces or other facilities in this area.
- 8) John Brown Francis School Playfield Approximately ten (10) acres located at Lansdowne Road and near Miantonomo Drive, within the Governor Francis Farms neighborhood. This facility is connected to the Francis School and includes a ballfield, tot lot, and volley ball court. Over 200,000 square feet is either grassed or wooded surrounding the existing facility. Parking is available at the Francis School.
- 9) Rhodes School Playfield Approximately six acres. Located at Underwood and Parkview, this facility is connected to the Christopher Rhodes School. Facilities include a ballfield, and tot lot. Over 160 square feet of area is either grassed or wooded. Parking is available at the Rhodes School.
- 10) Sand Pond Beach Approximately three (3) acres located at Massasoit Drive and Puritan Drive. The beach area faces Sand Pond and has about 120 linear feet. There are no off street parking or other improvements.
- 11) Spring Green School Playfield Approximately two (2) acres located at Shippen Avenue and Willing Avenue. The former Spring Green School is now a homeless shelter. However, the adjacent playfield includes one basketball court. Almost 1-1/2 acres of it is grassed area.

12) Wyman School Playfield - Almost nine (9) acres located at Parkside Avenue and Pleasant View Road, this facility is connected with the Wyman School and includes a ballfield, basketball court, volleyball court, tot lot, play area and approximately six (6) acres of wooded or grassed area. Parking is available at the Wyman School The ballfield is a multipurpose sport field that is also used for soccer. The City has the option of establishing a single purpose for the field and installing other fields in the wooded area.

Other recreation facilities and open space areas in this district include:

#### Local

Power Avenue Brook tot lot
Dryden Heights tot lot
Baylawn boat launch ramp
Holliman School playfields
and tot lot;
Passeonkquis Cove open space;
Squantum Drive Pond open space;
Cranberry Bog open space;
Cranberry Bog Brook-1 open space;
William B. Whittaker (Pecan Street)
open space.

#### State

Salter Grove - 8.5 acres with picnic tables, a boat launch and a tot lot; Narragansett Parkway Access - 7.8 acres with a boat launch; Narragansett Parkway - 55.5 acres of open space; Pettis Boatyard;

Occupasstuxet Cove (ASRI) - 3.1 acres of open space;

Brown Ravine (ASRI) - 56.6 acres of open space, with tot lot;

This neighborhood has facilities that are primarily connected to the schools. There are ten (10) fields, seven (7) tennis courts, and seven (7) basketball courts. Of the fields, most are devoted to baseball or softball. Two fields include soccer use; one is part of a multi-purpose field at the Wyman School and the other is at Aldrich Junior High School. There is a need to establish additional soccer facilities throughout this neighborhood given the fact that there is currently a shortage of soccer facilities and that the demand for soccer has been growing dramatically throughout the City of Warwick.

This cluster of neighborhoods has a population of 17,633 persons.<sup>13</sup> A summary of its combined facilities include:

#### **Private**

Туре	Acreage	Standard Req.	Surplus or Deficiency
Playlots	Over 7 acres*	4 to 8 acres	Adequate supply to serve this

			area.
Playgrounds	2.4 acres	17 to 35 acres	15 to 33 acres needed
Play fields	Over 63 acres	88 to 141 acres	25 to 78 acres needed
Recreation area	Over 4 acres	Variable	Adequate supply to meet the needs of this area.
Neighborhood Park	Over 2.5 acres	17 to 35 acres	15 to 35 acres needed to serve this area.
Large Park	None		Served by City-wide Facilities.

<sup>\* -</sup> includes Power Avenue, Dryden Heights, Holliman School, Adams Playground, Aldrich Junior High School, Arnold's Beach, Brown School, Rhodes School, Sprague Field, Spring Green School and Wyman School.

This district also includes over 23 acres of protected open space, including the following sites: Power Avenue, Dryden Heights, parts of Passeonkquis Cove, Squantum Drive Pond, Cranberry Bog and Pecan Street. Unprotected open spaces in this district which should be considered for future protection include Rock Island, additional parts of Passeonkquis Cove, Cranberry Bog Brook, Occupasstuxet Cove, Sand Pond and the Pawtuxet River.

Planning District: 2
Neighborhoods: Greylawn, Hoxsie,
Conimicut, Meadowbrook, and Old
Warwick
Census Tract(s) 214.01, 214.02,
215.01, and 218

This neighborhood incorporates over 160 acres of local open space and recreational sites, and 30+ acres of private recreational facilities (Bishop Hendricken High and Lou's

World of Golf).

The major local recreation and open space areas include:

- 1) Clegg Playfield Approximately seven (7) acres, this facility includes a ballfield, a tot lot, a basketball court, and a concession building. There is parking on approximately 36,000 square feet to accommodate about 90 cars. This facility also includes bleachers and lighting. There is about 90,000 square feet of grassed area but does not have any more room for further expansion without additional land taking.
- 2) Conimicut Point Park Approximately fourteen (14) acres, located at Elgin and Conimicut Point Avenue. This facility includes 900 linear feet of beach area, a state owned and operated boat launching ramp, and walkways to the beach. Recently it was renovated and the parking area was expanded to 120,000 square feet, which can accommodate approximately 300 cars. The sand dunes are in the process of being restored and a collection booth will also be installed.

- Approximately 52.4 acres, located at West Shore Road and Bend Street. This facility includes two ball fields, storage building, meeting building, and over 130,000 square feet of grassed or wooded areas. A 30,000 square foot parking lot can accommodate approximately 75 cars.
- 4) Warwick Veterans High School Field Pond Little Beach Approximately 30.74 acres, located at West Shore Road and Fletcher Street. This facility includes 200 linear feet of fresh water beach area, a football field and track, one ball field, one small track, six (6) tennis courts, 120,000 square foot parking lot and over 550,000 square feet of wooded and grassed areas. This facility also includes bleachers.
- 5) Holden School Playfield -Approximately 1.69 acres located at Hoxsie Street and Anscot Court. This facility includes a ballfield diamond, a basketball court, and a grassed area of 73,000 square feet.
- 6) Hoxsie School Playfield Approximately 14.3 acres located at
  Glenwood and Woodcrest Streets.
  This facility includes a ballfield, a
  basketball court, a tot lot and a
  wooded and grassed area of over
  600,000 square feet.

- 7) Porter Field Approximately 7 acres located at Vernon Street. This facility includes a ballfield, a basketball court, a tot lot and a 40,000 square foot parking area. Approximately 270,000 square feet is wooded and grassed areas. However, it is not likely that these areas can be developed because Lockwood Brook runs through the middle of the wooded area.
- 8) Sherman School Playfield Approximately 5 acres located at Kylie
  Avenue and Hobbs Road. This facility
  is connected to the Warren A. Sherman
  School and includes a ballfield,
  basketball court, and a volleyball court.
  Over 200,000 square feet are wooded
  or grassed. Parking is available at the
  Sherman School.
- 9) Wells Avenue Playground Approximately one (1) acre located at
  Wells Avenue and Pembroke Avenue.
  This area is mostly grassed and includes
  a tot area.
- 10) George Boyd Field Approximately two
  (2) acres located behind the public library at Sandy Lane. This facility includes a lighted ballfield, and almost 100,000 square feet or grassed or wooded areas. Parking is available at the public library.

Other recreation facilities and open space areas in this district include:

#### Local

Lockwood Brook 1, 2, 3 - 12.7 acres of open space; Buckeye Brook 1, 2, 3 - 5.7 acres of open space, including a tot lot;

Warner Brook - 4 acres of open space, including a tot lot; Lakeshore Drive area - 4.7 acres of open space; Parsonage Brook - tot lot; Warwick Pond Beach - 125 feet of beach frontage; Little Pond Beach - 75 feet of beach frontage with a tot lot; Warwick Pond Access;

#### State

None

#### **Private**

Bishop Hendricken High School; Lou's World of Golf:

This neighborhood has a population of 16,087 persons. Its combined facilities include:

Туре	Acreage	Standard Requirement	Surplus or Deficiency
Playlots*	Included in 11 facilities of over 60 acres	4 to 8 acres	Adequate supply to serve this area.
Playgrounds	None	16 to 32 acres	16 to 32 acres needed
Play fields	Over 104 acres	80 to 128 acres	Adequate supply to serve this area.
Recreation area	Almost 14-1/4 acres	Variable	Adequate supply to meet the needs of this area.
Neighborhood Park	None	16 to 32 acres	16 to 32 acres needed to serve this area.
Large Park	None		Served by City-wide Facilities.

Note: Includes Buckeye Brook-3, Clegg Field, Conimicut Point Beach, George Boyd Field, Holden School, Hoxsie School, Little Pond Beach, Parsonage Brook, Porter Field, Sherman School and Warner Brook.

This area includes twelve (12) fields, nine (9) tennis courts and six basketball courts. Aside from those of the high school, there are no soccer fields in this entire neighborhood. There is a need to establish at least one soccer field in this area and possibly locate it at the Hoxsie School Playfield considering that there are over 12 acres of wooded area at Hoxsie. This densely populated district has a need for

additional informal play areas.

Also within this district are 80+ acres of open space, including Lockwood Brook, Buckeye Brook, parts of Johnson Field at Bend Street, Warner Brook, the Lakeshore Drive area and Parsonage Brook. Unprotected open spaces in this district which should be considered for future protection include Warwick Pond, the shore and

waters of Conimicut Point and parts of Buckeye Brook and Mill Cove.

Planning District: 3
Neighborhoods: Longmeadow,
Warwick Neck, and Oakland Beach

Census Tract (s): 215.02, 216, and 217

This diverse neighborhood has 125+ acres of local open space and recreation facilities, most of which are connected to school facilities. One state facility, Longmeadow Access, and a number of private marinas, Rocky Point Park and two golf clubs are located within the district. The major local facilities include:

- 1) The Carrie Peabody Champlin Playfield-Approximately 6-1/2 acres located at Oakland Beach Avenue and Barbara Avenue. This facility includes two (2) ballfields (including three soccer fields on the outfields of the ballfields), one (1) tennis court, one (1) basketball court and a tot area. Parking is available on approximately 16,000 square feet to accommodate about 40 cars. About 250,000 square feet are either grassed or wooded.
- 2) Gorton School Football Field West -Approximately 27.5 acres located at Draper Avenue, this facility is connected with the Samuel Gorton Junior High School and includes a combination ballfield and football/soccer field. Almost 20 acres of this area is undeveloped.
- Oakland Beach Park Approximately 26 acres located at Burr Avenue and Oakland Beach Avenue. This facility includes a ballfield, picnic areas, bike and

walkpaths, natural areas and grassed areas. Parking is available on approximately 52,000 square feet to accommodate about 130 cars.

- 4) Palmer Avenue Playfield Approximately 4.25 acres located at Palmer Avenue and Cliff Road. This facility includes a ballfield, basketball court, and tot area. Off street parking is available around the ballfield.
- 5) Crockett Street Playground Approximately .8 acres located at Crockett Street and Strand Avenue. A tot area of approximately 35,000 square feet was recently removed. No other facilities or parking are available.
- 6) Gorton School Field East Approximately 10 acres located at Draper Avenue. This facility is also connected to the Samuel Gorton Jr. High School and is located East of the building. The facility includes a ballfield and two (2) tennis courts. Over 200 acres are now wooded or grassed. Parking is available at the Gorton Jr. High School.
- 7) Mission Playground Approximately less than ½ acre located at Oakland Beach Avenue and Burr Street. This facility includes one basketball court and one tot lot and is sited close to Oakland Beach Park.
- 8) Warwick Neck School Playground Approximately 2 acres located at Warwick
  Neck Avenue and Rocky Point Avenue.
  This facility is connected to the Warwick
  Neck School and includes only a tot lot along
  with wooded and grassed areas.
- 9) Bayside Field Approximately 14.7 acres between Oakside Street and Meadow View Avenue, accessed from Oakside Street. Two playing fields and a tot lot.

10) Bayside Beach - 9.5 acres with 1,670 feet of beach frontage, a boat launch ramp and a tot lot. Roughly parallels Ocean Avenue from Grove Avenue north to Cady Avenue.

This rather substantial cluster of neighborhoods includes seven (7) fields, three (3) tennis courts and three (3) basketball courts. Most of the facilities other than those connected with the schools are within Oakland Beach. Warwick Neck has no facility other than the tot lot at the school. Waterfront recreation, particularly boating-related in the private sector, is abundant in this district.

Protected open space is limited in this district.

The only area currently considered open space in the State's conservation and open space inventory is the Our Lady of Providence Seminary property on Warwick Avenue, which is partially developed for other purposes. Other recreational facilities and open space areas in this district include:

#### Local

See Above

#### State

Longmeadow Access – 0.6 acre waterfront access with a tot lot:

#### **Private**

Seaview Country Club – 49+ acres, 18 hole golf course;

Warwick Country Club – 112+ acres, 18 hole golf course; 4 tennis courts; swimming pool;

Our Lady of Providence – 70 acres,

3 tennis courts; tot lot;

Carlson's Marina:

Breezy Point Dock;

C-Lark Marina;

West Shore Marina;

Nick's Dock:

Angel's Marina;

Warwick Marina:

Warwick Cove Marina:

Winstead Marina:

Gull Marina:

Harbor Light Marina;

Little Rhody Sport Club;

Wharf Marina:

Benza's West Shore Marina;

Sound Mar Association;

Bayview Shellfish;

Rocky Point Park;

This neighborhood has a population of 11,176 persons. Its combined facilities include:

	Acreage	Standard Requirement	Surplus or Deficiency
Playlots	Included in 4 facilities of over 30 acres*	3 to 5 acres	Adequate supply to serve this area.
Playgrounds	1.2 acres	11 to 22 acres	10 to 21 acres needed
Play fields	Over 99 acres	55 to 90 acres	Adequate supply to serve this area, can serve adjacent or city-wide needs.
Recreation area	27 acres	Variable	Adequate supply to serve this area.
Neighborhood Park	Almost 13 acres.	11 to 22 acres	Adequate supply to serve this area.
Large Park	None		Served by City-wide Facilities.

<sup>\* -</sup> Includes tot lots at Bayside Beach, Bayside Field, Palmer Avenue Field and Warwick Neck School.

**Planning District:** 4

Neighborhood: Greenwood East, Wildes Corner, Buttonwoods, Apponaug, Nausauket, and Arnold's Neck

Census Tracts(s): 219.01, 219.02, 219.03, and 220

This area is served by over 320 acres of local open space and recreational facilities, one state facility (the Community College of Rhode Island), and several private recreational facilities, primarily marinas. Centrally located in the City of Warwick, this area includes also the two largest city-wide facilities which are City Park (200+/- acres) and the Mickey Stevens Sports Complex of over 40 acres. Other active recreation

facilities in this neighborhood are playgrounds and school ballfields. The following are major local recreational facilities:

- City Park Approximately 196 acres located off of Asylum Road. This is the largest single City Park in Warwick and has been undergoing a series of phase improvements. It includes four ballfields, two soccer fields, tot lots, three tennis courts, and several picnic areas. There are beachfront areas including boardwalks, walking paths, paved roads, bicycle ways, maintenance and storage areas and nature trails.
- Gorton Pond Approximately 5 acres located at Post Road and Veterans Memorial Drive. This fresh water beach includes 300 linear feet of beachfront along

with parking on 20,000 square feet for approximately 50 cars. It also includes a ramp and platform for the handicapped. There are paths and restroom facilities on this site. Approximately 100,000 square feet of area remains in a natural or wooded state.

- 3) Mickey Stevens Sports Complex Approximately 42 acres located at Sandy Lane. This multipurpose sports complex, includes two (2) indoor ice rinks, one (1) indoor swimming pool, concession and rest rooms, 8 lighted tennis courts, three basketball courts, three multi purpose soccer and baseball fields, and two volleyball courts. There is parking on approximately 240,000 square feet to accommodate about 600 cars.
- 4) O'Brien Field Playfield Approximately 4 acres located along Veterans Memorial Drive behind City Hall. This facility includes two (2) ballfields, one basketball court, tot areas and a storage building.
- 5) Winslow Playfield Approximately 14 acres located at Greeley Avenue. This playfield was originally three acres. Since it is located within the airport's clear zone, several houses that were adversely affected by aircraft noise were purchased and removed from the site by the State of Rhode Island. The resulting parcels from the house lots and abandoned streets are leased to the City. The new facilities include four girls' softball fields, one basketball court, one tot lot, and one concession building with a restroom. Two or more soccer fields are planned for this site.

- 6) Arnold's Neck Waterfront Park Approximately 2.5 acres, located at Halworth Street, fronting on Apponaug Cove. Formerly known as "Apponaug Cove Waterfront," this park was recently refurbished. It includes a municipal dock, seeded lawn area, and parking areas.
- 7) Apponaug Park Approximately .24 acres, located at Post Road near City Hall. This park has historical significance and is landscaped with flower beds and lawn.
- 8) Kerri Lynn Playground Approximately 1.6 acres, located at Kerri-Lynn Road and Boule Avenue. It includes a tot lot and wooded areas.
- Lippitt School Playground Approximately
   3.3 acres, located at Gulf Street, Almy and Turner Streets. This facility is attached to the Lippitt School. It includes a ballfield, a basketball court, and wooded and grassed areas.
- 10) Robertson School Playfield Approximately 4.5 acres, located at Nausauket Road. This facility is attached to the Robertson School. It includes a basketball court, a tot lot, open field and wooded and grassed areas.
- 11) Wickes School Playfield Approximately 4.8 acres, located at Buttonwoods Ave. This facility is attached to the Wickes School. It includes a ballfield, basketball court and wooded and grassed areas.

Other recreation facilities and open space areas in this district include:

#### Local

Brush Neck Cove - 8.9 acres of open

space;

Normandy Drive - 0.2 acres of open space;

Groveland Park - 0.3 acres of open space;

Naughton Avenue Park - 1.5 acres of open space;

Creekwood Drive Brook - 0.9 acres of open space;

Baker's Creek - 12.6 acres of open space;

Tuscatucket Brook - 1.8 acres of open space;

Staples Avenue - 0.4 acres of open

space;

Apponaug Cove Front - 2.5 acres of

open space;

Masthead Walk - 1.2 acres of open

space;

State

Community College of Rhode Island (CCRI) - 205 acres, 2 playing fields;

**Private** 

Al's Pitch and Putt -7.7 acres, 36 golf

William Kenney Jr. Field – 2.0 acres, 2

playing fields and a tot lot

This neighborhood has a population of 16,230 persons. Its combined facilities include:

Туре	Acreage	Standard Requirement	Surplus or <b>Deficiency</b>
Playlots	Included in 7 facilities of over 230 acres*	4 to 8 acres	Adequate supply to serve this area.
Playgrounds	3.5 acres	16 to 32 acres	12 to 28 acres needed
Play fields	Over 60 acres	80 to 130 acres	20 to almost 70 acres needed to serve this area.
Recreation area	6-1/2 acres	Variable	Adequate supply to serve this area.
Neighborhood Park	Almost 1/4 acre	16 to 32 acres	15 to 30 acres needed to serve this area.
Large Park	237 acres	80 to 130 acres	More than adequate supply to serve this area, also serves by City-wide needs.

<sup>\*</sup> \_ Includes tot lots at City Park, Gorton's Pond Beach, Lippitt School, O'Brien Field, Robertson School, Wickes School and Winslow Field.

As the central part of the City, these neighborhoods have the greatest concentration of recreation facilities. The

largest are city-wide facilities, with few neighborhood oriented parks. The highest concentration of neighborhood facilities is around

Apponaug, while other neighborhoods such as Nausauket and Buttonwoods are served by school or city-wide facilities. The expansion of Winslow Playfield is providing the City with much needed girls' softball fields and soccer fields.

In District 4 there are several open space parcels, including the City-owned Brush Neck Cove, Normandy Drive, Groveland Park, Naughton Avenue Park, Creekwood Drive Brook, Baker's Creek, Tuscatucket Brook, Staples Avenue, Apponaug Cove Front and Masthead Walk. Unprotected open spaces in this district which should be considered for future protection include parts of Tuscatucket Brook, Chepiwanoxet Point, parts of Baker's Creek, Mary's Creek, and the small stream feeding Apponaug Cove.

Planning District: 5

Neighborhoods: Hillsgrove and

Norwood

Census Tract(s): 211

These neighborhoods are located in the northwest sector of the City. While large in land area, it is populated by 6,000 persons, because a large bulk of the land area is consumed by the 1,000+ acres T. F. Green Airport. There are over 38 acres of local

recreation facilities and open space, no state facilities and two private recreational facilities.

The following are the major facilities in this district:

- 1) Ruberry Playfield Approximately 7 acres, located at Frederick Street and Pride Avenue, but also in close proximity to Norwood Avenue. This facility includes a ballfield, a little league ballfield, tot lot and parking area (14,000 sq. ft.) for about 35 cars. It also includes about 280,000 sq. ft. of wooded and grassed areas.
- 2) Cranberry Bog Brook 2 30+ acres of open space.
- 3) Norwood Elementary School 2.6 acres with a tot lot.
- 4) Belmont Park Approximately 38 acres located in an area along the Pawtuxet River where house lots were taken due to severe flooding problems and converted to fulfill open space needs and provide recreation facilities. This is one of the newest facilities in the City and includes a little league baseball field, two girls' softball, two soccer fields, a walking path, parking and landscaping.

This neighborhood is under served with less than 8 acres of recreational space. Its two ballfields are located in one park. Residents must travel to other neighborhoods or to city-wide facilities in Buttonwoods or the Mickey Stevens complex to gain access to recreational opportunity. Most of

these trips likely require an adult to drive, with limited opportunities for children to walk or ride their bicycles. Open space includes 30+ acres as part of the Cranberry Bog Brook site. Unprotected open spaces in this district which should be considered for future protection include the shorelines of Three Pond Brook and the Pawtuxet River.

This neighborhood has a population of 6,000 persons. Its combined facilities include:

Туре	Acreage	Standard Requirement	Surplus or Deficiency
Playlots	Included in three facilities of 40 acres*	1-1/2 to 3 acres	Adequate supply to serve this area.
Playgrounds	None	6 to 12 acres	6 to 12 acres needed
Play fields	43+ acres	30 to 48 acres	Adequate supply to serve this area.
Recreation area	None	Variable	Served by other adjacent areas.
Neighborhood Park	None	6 to 12 acres	6 to 12 acres needed to serve this area.
Large Park	None	30 to 48 acres	Served by City-wide facilities.

<sup>\* -</sup> Includes Cranberry Bog Brook - 2, Rubery Field and Norwood Elementary School.

**Planning District:** 6

Neighborhoods: Greenwood,

Pontiac, and

**Natick** 

Census Tract(s): 221 and 223

This neighborhood includes the Pawtuxet River and Routes I-95 and I-295, and major highway interchanges connecting these routes with each other. It is served by approximately 60 acres of local open space and recreational facilities, one state open space area (Airport Connector) and one private facility (Ledgemont Country Club).

- 1) Father Tirocchi Playfield (Natick Field) Approximately 9 acres, located between the Pawtuxet River and the soon to be abandoned Providence & Worcester (P&W) railroad right-of-way, and accessed via Railroad Row. This facility includes a ballfield, tennis court, basketball court and paved parking (19,500 sq. ft.) for about 50 cars. About 360,000 sq. ft. are reserved for natural and grassed areas.
- 2) Dodge Street Playfield Approximately 5.25 acres, located at Dodge Street and Chatworth Avenue. The facilities include a ballfield. There is no off-street parking and access is severely restricted. The adjacent Wethersfield Commons abuts the park on two sides making it difficult to reach.

- 3) Greenwood School Playfield Approximately 1 acre, located at Potters Ave. and Greenwood Ave. The facility is related to the Greenwood School. It was recently refurbished with a new basketball court, tot lot, parking and landscaping. It also has an existing ballfield.
- 4) Kenney Field Approximately 3.32 acres, located at Jefferson Blvd. This facility is leased to the City and includes one ballfield and adjacent wooded areas. No off-street parking is provided.
- 5) Pontiac Playground Approximately 1.8 acres, located at Greenwich Ave. This facility includes a tot lot, tennis and basketball courts. Parking on 6,000 sq. ft. can accommodate about 15 cars. An adjacent wooded area comprising approximately 33,500-sq. ft. is retained as open space.
- 6) Kettle Street Hill Approximately 1.93 acres. This site is a natural area with an

historical cemetery in the middle.

Other recreation facilities and open space areas in this district include:

#### Local

Airport Extension - 31.5 acres of open space;

Jambrey Avenue Brook - 0.5 acre tot lot;

Plat 246, Lot 273 - 0.3 acre open space; Plat 262, Lots 104 and 108 - 0.3 acre open space;

Sutter Avenue Area - 7.5 acres, including a tot lot;

#### State

None

#### **Private**

Ledgemont Country Club - 153+ acres, 18 golf holes and tot lot;

This neighborhood has a population of 9,155 persons, concentrated in the Greenwood, Pontiac and Natick neighborhoods. Its combined facilities include:

Туре	Acreage	Standard Requirement	Surplus or Deficiency
Playlots	Included at 6 sites	2 to 4 acres of 27 acres*	1 to 2 acres needed to serve this area.
Playgrounds	Almost 8 acres	9 to 18 acres	1 to 10 acres needed
Play fields	12-1/4 acres	45 to 70 acres	32 to almost 57 acres needed to serve this area.
Recreation area	155+ acres	Variable	Adequate supply to serve this area.
Neighborhood Park	None	9 to 18 acres	9 to 18 acres needed to serve this area.
Large Park	None	45 to 70 acres	Served by City-wide facilities.

......Includes Dodge Street Playground, Greenwood School, Jambrey Avenue Brook, Kenney Field, Natick Field, and Sutter Avenue area.

This area of the City is under served in terms

of active recreation, with 4 ballfields, 2 tennis

courts and 4 basketball courts. Over 60 acres of land in this district is considered protected open space, most in the Airport Connector site. Unprotected open spaces in this district which should be considered for future protection include the shore and waters of the Pawtuxet River, Three Pond Brook, and Gortons Pond.

**Planning District:** 7

Neighborhoods: Cowesett and Bald

Hill

Census Tract: 222.01 and 222.02

Within this neighborhood, there are over 94 acres of local open space and recreational facilities, most of which are connected with schools. Cowesett is the fastest growing neighborhood in the City and as such requires careful attention to its needs.

- Cedar Hill School Playfield Approximately 5.4 acres located at the
  corner of Cowesett Road and Love
  Lane. The facilities include a baseball
  field, basketball court and a tot lot.
  Almost 200,000 square feet are
  wooded or grassed. The field is in poor
  shape and is used primarily for practice
  games.
- Duchess Street Field Approximately
   9.96 acres located at the end of
   Duchess Street and abutting the Route
   95 right-of-way. This facility includes a

- ballfield and paved parking for about 20 cars. Over 424,000 square feet are either wooded or grassed. Nearby power lines have given rise to questions about the safety of this park.
- 3) Scott School Field Approximately 3.26 acres located at Baldwin Road. This facility is attached to the Scott School. It includes a ballfield and a basketball court, and about 142,000 square feet of wooded or grassed areas.
- 4) Tollgate High School Field Approximately 5.94 acres located off Tollgate Road within the High School Complex. This facility includes several multi-purpose playing fields and tennis courts. Other recreational facilities and open space areas in this district include:

#### Local

Plat 248, Lot 16 - 0.7 acre open space

State

None

#### **Private**

St. Gregory - 1.7 acres, 2 playing fields and a tot lot;

Little Rhody Beagle Club - 105 acres of open space;

YMCA - 113 acres, playing fields, tennis courts, beach frontage, swimming pool, picnic tables, trails, tot lot;

Bittersweet Hill Farm - 10 miles of horse trails;

Anbo Farm - 5 miles of horse trails; Kaju Farm - open space; Drum Rock Center - open space;

This neighborhood has a po	pulation of 8.278 persons.	Its combined facilities include:

Туре	Acreage	Standard Requirement	Surplus or Deficiency
Playlots*	Included at 3 sites of over 28 acres	2 to 4 acres	1 to 2 acres needed to serve this area
Playgrounds	Over 15 acres	8 to 16 acres	Adequate supply to serve this area
Play fields	9 acres	41 to 66 acres	32 to 57 acres needed to serve this area
Recreation area (YMCA)	113 acres	Variable	Served by private facility.
Neighborhood Park	None	8 to 16 acres	8 to 16 acres needed to serve this area
Large Park	None	41 to 66 acres	Served by City-wide facility

<sup>\* -</sup> Includes Cedar Hill School, Duchess Street Playground, Scott Elementary School

There are several large private open space holdings in this district, including 105 acres at the Little Rhody Beagle Club, Bittersweet Hill Farm, Anbo Farm, Kaju Farm and the Drum Rock Center. Unprotected open spaces in this district which should be considered for future protection include the shore and waters of Hardig Brook.

8 **Planning District:** 

**Neighborhood:** 

**Potowomut** 

**Census Tract:** 224

This neighborhood has one City facility connected with the Potowomut School. However, municipal facilities are augmented by the state owned Goddard Park and a

private golf course. The following are the major recreational facilities and open space areas in

- 1) Potowomut School Playfield Approximately 1.2 acres located along Potowomut Road. It includes a small ballfield, basketball court and About 36,000 square feet are tot lot. grassed.
- 2) Goddard Park Over 470 acres of open space and recreational facilities including a beach, picnic areas, walking and riding trails, a golf course, playing fields and a boat ramp. This State facility is open year round to the public, and is an important regional resource.
- 3) Potowomut Fisherman's Access 0.1 acre access to shorefront at Potowomut Road.
- 4) Forge Road Area 10+ acres of State-owned open space accessed from Forge Road, including a tot lot.

This district 8 has a population of 2,564 persons. Its combined facilities include:

Туре	Acreage	Standard Requirement	Surplus or Deficiency	
Playlots*	Less than 1/4 acre	½ to 1-1/4 acres	1/4 to 1 acre needed to serve this area	
Playgrounds	Less than 1 acre	2-1/2 to 5 acres	1-1/2 to 4 acres needed to serve this area	
Play fields	None	13 to 20 acres	13 to 20 acres needed to serve this area	
Recreation area	88+ acres (private)	Variable	Served by other adjacent areas	
Neighborhood Park	None	2-1/2 to 5 acres	2-1/2 to 5 acres needed to serve this area	
Large Park	472 acres**	41 to 66 acres	Served by regional facility	

<sup>\* -</sup> Includes Forge Road Area.\*\* - Goddard Park.

There are several environmentally important open spaces in this district, including the shore and waters of Greenwich Cove, the Hunt River, the Potowomut River and Marsh Point.

Consideration should be given to additional protection for these sensitive open space resources.

#### **CHAPTER 7**

#### GOALS AND OBJECTIVES

- 1) To foster public/private efforts to enhance the City's neighborhood oriented recreation facilities.
- To increase the availability of tot lots and playgrounds in neighborhoods where they are needed.
- To involve neighborhood associations in the maintenance of tot lots and encourage the development of so-called magic kingdom playlots.
- c) To make neighborhood playgrounds safer with better lighting and facilities demarcated paths and signage for children who walk or bicycle to the neighborhood facility.
- 2) To preserve and maintain freshwater and saltwater shore public access points.
- a) To prepare and maintain an active inventory of all city and state public right-of-ways leading to the shoreline and freshwater ponds and rivers. The inventory shall be categorized according to type, including boat ramps, conservation areas, beaches, and the like.
- b) To demarcate according to category type and wherever feasible and practical, the public rights-of-way identified in the inventory under 2a.
- c) To maintain the public rights-of-way identified in the inventory under 2a.

- d) To identify, retain and foreclose rights of redemption on all tax title properties within 200 feet of the shoreline and all inland water bodies that provide potential access points and scenic vistas to the shore, fresh water ponds and rivers.
- 3) To implement a program of open space acquisition that would identify and use the full spectrum of acquisition techniques.
- a) To identify specific parcels or land for acquisition for open space and recreation purposes, for instance the Rice farm, Budlong farm, Chepiwanoxet, and the like.
- b) To consider acquisition of open space easements and purchase of development rights for the purposes of saving existing open spaces within the City, for instance the Morris farm, Confreda farm, and the like.
- To identify farmlands within the City and promote acquisition of development rights to maintain these active farms.
- 4) To foster, where possible, bicycle/pedestrian linkages and/or "green corridors" between existing open space and recreation nodes. (see Figure 5 on following page)
- a) To identify specific playgrounds, play fields and large parks and promote linkages between these. Such linkages may be green spaces as well as existing public rights of ways.
- b) To demarcate bicycle paths linking the

various open spaces and recreation facilities in the City. Examples of linkages include corridors along the Pawtuxet River between Belmont Park and Pawtuxet Village. This is particularly important for neighborhoods that are under served by such facilities.

# 5) To rededicate the City to maintaining its valuable open space/recreational resources.

- a) To maintain the inventory of open spaces and recreational sites contained in this plan (including wood lots, agricultural land, etc.) which is rated by size, proximity to wetlands, presence of wildlife habitats, watershed, etc.
- b) To increase the City's maintenance budget on a phased basis each year for better operate and maintain existing open space and recreational resources.
- c) To develop a full scale city-wide maintenance manual that would call for ongoing maintenance for all facilities throughout the year.
- d) To design facilities that would be sensitive to maintenance scheduling and operational procedures. Examples of these might be fostering single-purpose fields where off-season minimal use would give the fields a chance to regenerate.
- 5) In line with the requirements of the Americans with Disabilities Act (ADA), promote handicap accessibility to Warwick's parks, beaches, and other public

#### recreation facilities.

- a) To identify the accessibility of all parks, beaches, and recreational facilities as to the accessibility to handicapped persons.
- b) To install handicapped ramps, set aside handicapped parking, and other handicapped facilities and facilities that currently lack them.
- c) To publish a guide of recreation facilities specifically geared towards handicapped people within the City indicating how these may be accessed and what particular hazards might be on-site.
- 7) To protect remaining wetlands, open space and shoreline areas.
- a) Protect freshwater bodies, coastal waters, areas with soil limitations, unique natural features, fish and wildlife habitat, and threatened and endangered species habitat through land use planning and regulatory management programs.
- b) Prioritize acquisition programs to those areas that have the most potential for preserving the City's natural resources.
- Coordinate with the Rhode Island Natural Heritage Program on a regular basis to determine sensitive habitat locations.
- d) Develop a series of protection and management recommendations for each identified habitat location in coordination with the Rhode Island Natural Heritage Program.
- e) Consult with the Rhode Island Natural Heritage Program staff for information on

identified sites which may potentially be impacted by a development proposal.

#### 8) To preserve wetlands water quality.

- a) To develop a stormwater management plan and ordinance that seeks to mitigate existing impacts through retroactive improvements to the City's stormwater management infrastructure and regulation of new development.
- b) To foster acquisition of buffer areas around significant wetlands areas.
- To publicize household hazardous materials collection and recycling program to counteract illicit or improper disposal of household hazardous materials.
- To educate homeowners on the proper use of chemical fertilizers, herbicides and insecticides.
- e) Encourage or require homeowners to tie into existing sewer lines where available. Consider providing incentives such as low/no interest loans to defray cost of hooking up to system.
- f) Develop an environmental science component in high school science programs, that would focus on Warwick's environmental resources and the threats to those resources.

#### 9) To preserve wildlife habitat.

- a) To foster acquisition of significant wildlife habitat sites.
- b) To encourage cluster development that may preserve wildlife habitats

c) To enforce wetlands regulations.

# 10) To identify and seek a variety of funding sources to implement a program of open space acquisition.

- a) City and/or state matching bond issues.
- b) Fund open space purchases through real estate transfer fee (would require State enabling legislation).
- c) Create a quasi-public agency to be named the Warwick Preservation & Development Agency, whose purpose will be to raise revenue and incur debt, with City Council approval, to finance open space, recreation and economic development initiatives and remove the debt burden away from the City's operating budget.

## 11) To involve citizens in the planning process.

- Consult private organizations and groups interested in the environment and recreational facility development.
- b) Maintain liaison between planning and citizen groups.
- Provide environmental education programs through the schools and civic and public organizations.

## 12) To further use Federal and State funds for recreational needs.

a) To develop programs with federal and state funds for the community to participate in, work for the City, and work with the environment.

- b) To incorporate the recommendations of this plan into the City's capital improvements program.
- 13) To maintain high standards of urban design and aesthetics in public open spaces.
- a) To develop and maintain a street tree planting program.
- b) To preserve the open character of the City.
- c) To encourage private beautification attempts, such as neighborhood and business groups' efforts to plant flowers

- and other landscaping to enhance public and private open spaces.
- 14) Create and manage a municipal tree farm.
- 15) Secure a blanket approval from the Rhode Island Department of Environmental Management for the clearing of debris in brooks and streams.

#### **CHAPTER 8**

## PARKS, RECREATION AND OPEN SPACE PROPOSED ACQUISITION AND DEVELOPMENT PROGRAM

During the winter of 1993-94 the Planning Department undertook an audit of all state funded recreation projects within the City of Warwick. These were projects that had been financed through a combination of local and state capital improvement bonds. The result of this audit was a reimbursement to the City of over \$1.4 million which is being redirected into new recreation related initiatives. The following list reflects the priorities established by the Mayor's Recreation Advisory Committee:

Active Recreation Projects:	<u>\$300,000</u>
Winslow Soccer Fields	100,000
Pilgrim Track	\$100,000
Sprague Field	\$ 25,000
Norwood-Ruberry Field	\$ 25,000
Spring Green School Playfield	\$ 15,000
Arnold's Neck Park	\$ 10,000
Wells Avenue Playground	\$ 10,000
Recreation Accessibility Projects:	<u>\$195,000</u>
Thayer/Warburton ADA Improvements	\$ 90,000
Senior Transportation Equipment	\$ 90,000
Impossible Dream	\$ 15,000
<b>Shoreline Access Improvement Projects:</b>	<u>\$115,000</u>
Oakland Beach boat ramp facility	\$110,000
Aspray Marina Dock	\$ 5,000
Passive Recreation/Open Space Projects:	<u>\$ 65,000</u>
Pawtuxet River Trails	\$ 25,000
Warwick Pond	\$ 20,000
Street Trees	\$ 20,000
Match for possible EDA grant:	<u>\$ 62,500</u>
One of the following:	
Oakland Beach Boat Ramp	
Thayer/Warburton roof repair	
City Hall Marketplace	

#### TOTAL \$737,000

## Other projects recommended for funding: \$52,000

Bend Street Playground \$ 15,000 Mickey Stevens Tot Lot \$ 5,000 Cedar Hill School Playground\$ 10,000

### Proposed City-Wide Facilities

#### **Improvements** 14

In addition to the above-mentioned State Reimbursement Projects, the Plan includes a secondary priority list of city-wide improvements which would be funded out of the City's capital improvements program.

#### City Park

Development of "Green" – Gazebo, walking paths, etc.

New entrance (includes bridge over Brushneck Cove, minor land acquisition)

Rehabilitation – playground, back entrance, traffic circulation improvements \$30,000 maintenance a year

#### Winslow Park

Develop two soccer fields Walking/jogging trail Landscaping New traffic pattern \$10,000 maintenance a year

#### **Belmont Park**

Passive recreation area (canoe launch)

One soccer field

\$20,000 maintenance a year

#### **Conimicut Point**

\$10,000 maintenance a year

#### Arnold's Neck

New dock (to supplement existing dock)
Drainage improvements
Maintenance on existing dock
\$10,000 maintenance a year

#### **Thayer & Warburton Arenas**

New Roof

New icemaking system

Bleachers

Miscellaneous

Maintenance - \$50,000/yr.current

75,000/yr. projected

#### **McDermott Pool**

Heating system

Locker room expansion

Roof

Exercise room

#### **Park Department Offices**

New entrance

Large and small handicap accessible meeting rooms

Sports shop (lease space to vendor)

Problems – Probable expansion area is site of complex's ISDS. Use of area would require hooking up to available sewer line

#### **Field House**

Dismantle rifle range

Remove school bus & DPW storage lots

on site

Construct field house with accessory parking (multi-use facility)

#### **Boat Ramps (3)**

Construct boat ramps and accessory facilities, including marine pump-outs

#### **Mickey Stevens Complex**

Rehabilitation to playing field sprinkler systems

Regarde playing fields

Regrade playing fields

#### **Harbor Master**

Needs full-time position Equipment

\$10,000 maintenance a year

#### **Pawtuxet Park**

Reconstruct seawall Correct erosion problem Add landscaping

Upgrade parking
Add Tot Lot

#### Replace/Rehabilitate Basketball courts

City-wide – Fifteen (15)

#### Replace/Rehabilitate Tennis courts

City-wide – Ten (10)

#### Personnel

Add six additional full-time staff (permanent staffing at larger facilities)

#### **Oakland Beach**

Landscaping

**Parking** 

Beach sand replenishment

Tot Lot

\$50,000 maintenance a year

#### Equipment

Ten (10) vehicles purchased over ten years

Tractors, Trucks (dump, pick-up, multi-Purpose), Utility vehicle, Compactor

#### **Clegg Field**

Expand parking lot

Relocate basketball court

New Tot Lot

Add sprinkler system

Rehabilitate building

\$10,000 maintenance a year

#### **Historic Cemeteries**

Rehabilitation – replace, repair, add fencing, reset stones (includes repair),

Landscaping

Maintenance staff (2)

Tools and equipment

\$10,000 maintenance a year

#### **Rights-of Way**

Development (assumes 100 ROW's-signage, paths, etc)

\$10,000 maintenance a year

#### **Gorton's Pond**

Rehabilitate bath-house

Replenish beach sand

Rehabilitate tot lot

Clear water weeds

\$10,000 maintenance /every 2 years

#### **Rights-of-Way (Waterfront)**

Acquisition of Bayview Site

Development/Rehabilitation of Bay View

Site

#### **Park Police**

Division of regular W.P.D.

Two full time (nights)

Two part time (weekends)

#### **Bikepath**

Update 1974 Bikeway Plan

	Develop 30 miles of grade separated bike	?	Landscaping
	paths linking activity centers (would include	?	\$10,000 maintenance/year
	minor and major infrastructure	?	Total \$300,000
	improvements)		,
Bike	eway		Adams Street
?	Twenty-miles of designated roads (money	?	Fencing
•	for signage, maps, and promotion).	•	Landscaping
	for signage, maps, and promotions.	?	5-year maintenance & rehabilitation
		?	Total \$70,000
Proj	posed Park Facility Improvements (By	•	10141 \$70,000
Dlor	uning District)		Arnolds Pond
Гіаі	nning District)	?	Close beach
Dist	rict 1:	?	Erect fence
		?	Total \$10,000
	Aldrich	?	Note: Mostly utilized by
?	Rehabilitate/Field Improvement		non-residents, no parking area.
?	\$50,000 maintenance/year, &		City Park -Building- concession
	improvements		stand, restrooms
	Pawtuxet		John Brown Francis
	Discussed in city-wide facilities	?	Rehabilitate (ground cover)
	above	?	Rehabilitate tot lot.
		?	New basketball court
	Pilgrim School	?	5-year maintenance
	Rehabilitation four tennis courts	?	Total \$40,000
	Rehabilitation two play fields		
	5-year maintenance		<b>Christopher Rhodes School (Playfield)</b>
	Total \$30,000	?	5 year maintenance/rehabilitation
		?	Total \$10,000
	Sprague Field		
?	Rehabilitate basketball court		Sand Pond Beach
?	Rehabilitate tot lot	?	Improve path to beach
?	5-year maintenance	?	Replenish beach sand
?	Total \$60,000	?	5 year maintenance/rehabilitation
		?	Total \$10,000
	Whittaker Field		
	Relocate one field		Spring Green
	Construct new ballfield	?	Rehabilitate basketball court
	Rehabilitate existing ballfield	?	New tot lot
	Additional fencing	?	5 year maintenance & new
	Rehabilitate basketball courts		construction
	Expand parking areas	?	Rehabilitation

?	Total \$40,000	?	5-year maintenance
•	10ιαι φ40,000	?	Total \$40,000
	Wyman School	•	10tal \$40,000
?	Expand playfield		Wells Avenue
?	Expand tot lot	?	New playground equipment
?	Minor clearing in wooded area to	?	5-year maintenance
•	improve access for passive	?	Total \$30,000
	recreation.	•	10th #30,000
?	Overlay basketball court	Distr	rict 3:
?	5 year maintenance	Disti	
•	5 year mamonanee		Carrie Peabody Champlin Field
Dist	rict 2:	?	New tot lot equipment
2150		?	Two new backstops
	Ann M. Bend	?	Fencing
?	No improvements	?	Clearing land
·	Tio Empro i onionio	?	5-year maintenance
	Warwick Vets/Little Pond Beach	?	Total \$60,000
?	Replenish beach sand	·	2300 433,333
?	5year maintenance/ Rehabilitation	Distr	rict 4:
?	Total \$10,000		
	,,,,,,,,		<b>Gorton School Football Field</b>
	Holden School	?	Reconstruct field
?	New backstop, baseball diamond.	?	Fencing
?	Rehabilitate basketball court	?	Rehabilitation/5-year maintenance
?	5-year maintenance	?	Total \$140,000
?	Total \$30,000		
			Father O'Hara Field/Oakland Beach
	Hoxsie School		Park
?	5-year maintenance	?	Parking lot rehabilitation
?	Total \$10,000	?	5-year maintenance & rehabilitation
		?	Total \$40,000
	Porter Field		
?	Fence ballfield		Palmer Avenue Playfield
?	Rehabilitate basketball court	?	New tot lot
?	New tot lot	?	New equipment
?	Upgrade turf	?	Overlay basketball court
?	5-year maintenance	?	Landscaping
?	Total \$60,000	?	Expand parking
		?	5-year maintenance
	Sherman School	?	Total \$40,000
?	Upgrade ballfield		
?	Rehabilitate basketball court		Gorton School (East)
?	Fencing	?	Fencing

?	Upgrade infield	Ruberry Field		
?	Overlay tennis courts	? Rehabilitate basket	tball court	
?	5-year maintenance	? Fencing, expand page 2	arking	
?	Total \$50,000		uisition (improve	
	,	access)	` 1	
	Warwick Neck School	? Rehabilitate ballfie	lds, tot lot, 3-year	
?	New playground equipment	maintenance	, , , , <b>,</b>	
	? Free-standing basketball	? Total \$110,000		
	courts	,		
?	5-year maintenance/rehabilitatio	District 6:		
?	Total \$40,000			
		Father Tirocchi Field		
	O'Brien Field	New Tot Lot		
?	Lights	Repair fencing		
?	Relocate basketball court	Upgrade ballfield,	haskethall court	
?	New tot lot equipment	5 Year maintenance		
?	5-year maintenance/rehabilitatio		~	
?	Total \$100,000	1 10tai \$00,000		
•	10tai \$100,000	Dodge Street		
	Komi I van	? Reverse ballfield		
9	Kerri-Lynn		م (برماء ماء : النامة مرا	
?	No improvements	? 5-year maintenance	e/renaomtation	
	14611	? Total \$90,000		
0	Lippit School	G 101 1		
?	Upgrade ballfield	Greenwood School		
2	Rehabilitate basketball court	? 5-year maintenanc	e	
?	5-year maintenance	? Total \$10,000		
?	Total \$20,000			
		Kenney Field		
	Robertson School	? Fencing		
?	Upgrade field/resod	? 5-year maintenanc	e	
?	5-year maintenance/	? Total \$20,000		
	rehabilitation			
	Total \$30,000	Pontiac Playground	Pontiac Playground	
		? New tot lot equipm	nent	
	Wickes School	? 5-year maintenanc	e	
	Resurface basketball court	? Total \$40,000		
	Some clearing of trees			
	Upgrade ball field	District 7:		
	5 Year maintenance			
	Total \$30,000	Cedar Hill School		
	•	? New ballfield		
Dist	trict 5:	? Drainage work		
		? Basketball court		

- ? 5-year maintenance
- ? Total \$90,000

#### **Duchess Street**

- ? Tot lot equipment
- ? 5-year maintenance Total \$40,000

Note – Concern over presence of high-tension lines. Could utilities for land swap with developer for new park site?

#### **Scott School Field**

Overlay basketball court 5-year maintenance/rehabilitation Total \$20,000

#### **Tollgate High School**

City:

- ? Reseeding/loaming fields
- ? 5-year maintenance/rehabilitation
- ? Total \$90,000
  - School Department:
- ? New track & combination fields (would require blasting of ledge).
- ? Total \$2 Million

#### **District 8:**

#### **Potowomut School**

- ? New tennis courts
- ? New basketball courts
- ? 5-year maintenance
- ? Total \$70.000

#### **Priority Open Space Sites for Protection**

The following properties have been identified as major scenic, historic and environmental assets to Warwick. All identified sites are at present threatened by development.

1. Morris Farm, Warwick Avenue (Plat 352,

Lot 9)

- 2. Foster and Barton Farms, Centerville Road (Plat 250, Lot 1 & Plat 251, Lot 18)
- 3. Allen Homestead, Toll Gate Road (Plat 247, Lot 8)
- 4. Rice Farm, Commonwealth Avenue (Plat 247, Lot 8)
- 5. Budlong Farm, Buttonwoods Avenue (Plat 369, Lot 111)
- 6. Cole Farm, Cole Farm Road (Plat 315, Lots 123, 36 and 136)
- 7. Beagle Club, Cowesett Road
- 8. Aldrich Estate, Warwick Neck Avenue
- 9. Alfred A. Reed Estate, Post Road
- 10. Confreda Farm, Airport Road (Plat 311, Lot 191, Plat 312, Lot 10)
- 11. Dawley Farm, Cowesett Road
- 12. Parcels abutting the Pawtuxet River (east of Belmont Park to bridge); formerly Warwick Industrial Track (United Electric Railway Trolley Line). Potential to provide greenway opportunities to Pawtuxet Village.
- 13. Selected parcels in Rhode Island Farm, Farm and Open Space Program. Specific parcels targeted for protection include:
  - ? Plat 218, Lot 1 (13.7 acres) access via Abigail Street and Gilbert Stuart Drive:
  - ? Plat 222, Lot 3 (9.9 acres) access via Love Lane;
  - ? Plat 226, Lot 4 (33.9 acres) access via Major Potter Road; and,
  - ? Plat 231, Lot 4 (20.6 acres) access via Cowesett Road.
- 14. Assorted small vacant land holdings prominently located along Sand Pond which provide excellent access to a water body in a highly dense area.
- 15. The shore and waters of the:
  - ? Pawtuxet River;
  - ? Three Pond Brook;

- ? Hardig Brook;
- ? Hunt River;
- ? Potowomut River;
- ? Passeonkquis Cove;
- ? Warwick Pond;
- ? Buckeye Brook;
- ? Gorton's Pond;
- ? Mill Cove;
- ? Occupasstuxet Cove;
- ? Tuscatucket Brook and Pond;
- ? Baker's Creek;
- ? Mary's Creek;
- ? Sand Pond;
- ? Greenwich Cove;
- ? Brook feeding Apponaug Cove; and,
- ? Cranberry Bog Brook.
- 16. Undeveloped, environmentally sensitive portions of:
  - ? Chepiwanoxet Point;
  - ? Rock Island; and,
  - ? Marsh Point.

#### **Footnotes**

- <sup>2</sup> Correspondence from Division of Planning and Development, RIDEM to Mr. Michael Phillips, Albert Veri & Associates, Inc., October 3, 1990.
- <sup>3</sup> Correspondence from Division of Planning and Development, RIDEM to Mr. Michael Phillips, Albert Veri & Associates, Inc., October 3, 1990.
- <sup>4</sup> Harbor Management Plan, 1989-1993, City of Warwick, Rhode Island, Amended March, 1991, Pare Engineering Corp., page II-21.
- Harbor Management Plan, 1989-1993, City of Warwick, Rhode Island, Amended March, 1991, Pare Engineering Corp., page II-20.
- <sup>6</sup> Ibid, page II-18.
- <sup>7</sup> Ibid, page II-19.
- Harbor Management Plan, 1989-1993, City of Warwick, Rhode Island, Pare Engineering Corporation for the Harbor Plan Commission, Amended March, 1991.
- <sup>9</sup> Ibid., p. II-29.
- <sup>10</sup> Ibid., p. II-31.
- <sup>11</sup> Ibid., p. II-34.
- <sup>12</sup> Ibid., p. II-36.
- <sup>13</sup> 1980 Census.
- Costs shown reflect only maintenance and not capital expenditures.

Preliminary Census 1990 count, as of September 1990, indicated a figure of less than the 1980 census, a net loss in the last decade. Since the figure is being disputed by the City as an undercount, the State estimates will have to stand for the purposes of this plan.